PROJECTION OF THE NUMBER OF PASSENGERS IN 2045 ON THE REVENUE OF AIRPLANE PASSENGER SERVICES (PJP2U) AND CHECK IN COUNTERS AT HALU OLEO KENDARI AIRPORT

Moch. Zaky Musaffa^{1*}, Fahrur Rozi², Ahmad Musadek³

^{1,2,3)} Civil Aviation Polytechnic of Surabaya, Jemur Andayani I/73 Wonocolo Surabaya, Jawa Timur, Indonesia, 60236 *Corresponding author. Email: <u>moza.zaky23@gmail.com</u>

ABSTRACT

Halu Oleo Kendari Airport is an airport managed by the Ministry of Transportation through the Halu Oleo Kendari Class 1 Organizing Unit. Along with the times this airport has changed its status to a Public Service Agency (BLU). The purpose of this study is to calculate the estimated amount of revenue obtained from Aircraft Passenger Services (PJP2U) and revenue from the use of check in counters until 2045 at Halu Oleo Kendari Airport. The research method that will be used is descriptive quantitative. Forecasting the number of passengers in the next 21 years using the linear regression method. This method is also used to determine the number of passengers until 2045 to see how much revenue is generated from PJP2U and Check in Counter Usage. The data to be processed is data on the number of departing passengers in 2014-2018. The data is then analyzed by simple linear regression method using IBM SPSS software. The analysis results from the SPSS software are then entered into the formula by calculating the number of passenger forecasts until 2045 at Halu Oleo Kendari Airport. The number of passengers predicted in 2045 with a total of 3,509,878 will affect the amount of revenue that will be obtained by the airport from Aircraft Passenger Service Revenue (PJP2U) and the use of reporting places (Check in Counter).

Keywords: Halu Oleo Kendari Airport, PJP2U, Check in Counter, Forecasting, Simple Linear Regression

1. INTRODUCTION

Airport is an essential infrastructure in air transportation activities in every country, especially Indonesia, which is an archipelagic nation where air transportation plays a crucial role in facilitating the activities of its population. The transportation system in a region is always developed with the intention of forming a unified network of transportation routes within the region and its connection to other regions. Therefore, the development and expansion of the regional transportation system must be planned and built gradually, continuously, comprehensively, and wellintegrated.

An airport is an area on land and/or water with specific boundaries used as a place for aircraft to land and take off, for passengers to board and disembark, for loading and unloading goods, and as a point for intra- and intermodal transportation transfers, equipped with aviation safety and security facilities, as well as primary and supporting facilities. As such, many activities are carried out in the operational and transportation processes at the airport, involving several other stakeholders such as ground handling companies, cargo companies, and other companies, whether related to aviation operations or not.

Halu Oleo Airport is an airport located in Konawe Selatan Regency, Southeast Sulawesi. This airport has the IATA code (KDI) and the ICAO code (WAWW). Halu Oleo Airport is directly managed by the Ministry of Transportation and operated by the Airport Management Unit. This class 1 airport serves domestic flights. Halu Oleo Airport has undergone several service improvements, including facilities on both the land side and the airside.

 Table 1. Number of PJP2U Revenue and Reporting Locations (Check-in Counter)

Year	Number of Departing Passengers
2010	303420
2011	336697
2012	429707
2013	453837

2014	420573
2015	478692
2016	635558
2017	744432
2018	786981



Figure 1. Passenger Data Graph of Halu Oleo Airport, Kendari (Data from LLAU Halu Oleo Airport)

According to Satyarini (2007), before forecasting, it is important to observe the data patterns we have. These patterns can be seen from the components of the data, where according to Murdick (1990:51), data consists of trend components, which indicate the tendency of data to rise or fall, and seasonal components, which represent fluctuations in demand above or below the trend line occurring annually. Cycles represent patterns occurring every few years, and random components are "blips" in the data caused by unpredictable events. Additionally, visualizing these data components in the form of a graph, like Figure 1.1 above, makes it easier to understand.

From the data above, it is observed that from 2014 to 2018, Halu Oleo Airport experienced an increase in the number of passengers each year. Therefore, the data to be processed is from 2014 to 2018 because, during these five years, Halu Oleo Airport in Kendari saw a fluctuating increase in passenger numbers. The data from the last five years (2019-2023) cannot be used for forecasting as passenger numbers have tended to fluctuate due to uncertain events, such as the COVID-19 pandemic, which impacted revenue in terms of PJP2U and check-in counters.

The data will be processed using simple linear regression analysis with SPSS software. The data for the number of departing passengers from 2019-2023 cannot be processed due to the impact of the COVID-19 pandemic, which was a force majeure or unpredictable event. According to Fahrur Rozy, data used for forecasting should not be affected by uncertain or unpredictable events such as pandemics, natural disasters, and so on (Personal Communication, July 26, 2024). For example, on September 28, 2018, an earthquake and tsunami struck Palu City, Central Sulawesi, causing the airport to halt operations for commercial flights for 12 days until October 10, 2018.

The growth and development of activities in Kendari City, which is the capital of Southeast Sulawesi Province, have brought about several impacts, including on the quality of service, facilities, and infrastructure of air transportation.

According to the article "Demographic Bonus and Golden Indonesia" (Central Statistics Agency, 2023), 2045 is set as the final year for adjusting regional development directions in Indonesia under the Vision of Golden Indonesia 2045. Minister of Transportation Budi Karya Sumadi said that transportation is one of the sectors playing a crucial role in realizing the vision of Golden Indonesia in 2045. Sustainable infrastructure development can help achieve the Vision of Golden Indonesia in 2045. Airport infrastructure is a benchmark in supporting the development of a region, especially since airports are one of the gateways to the economy in the area. Thus, revenue projections are useful for airports as a basis for budgeting to improve airport infrastructure and service facilities to ensure comfort and safety in terms of facilities and infrastructure.

The management of airports is crucial for airport service providers regarding facilities and passenger services to support airport operations. The aviation industry in Indonesia is currently growing rapidly. Therefore, one of the important aspects of a flight that must be considered is the service to air passengers, both those departing and arriving at the airport.

Airport services are services provided to airport service users by general airport management units or Airport Business Entities. These services are provided to aircraft, passengers, cargo, and mail, which are customers or users of airport services. However, these services are not free or gratis but come with tariffs or fees imposed by the airport on customers or users of these services. One of the airport service tariffs is PJP2U or Passenger Service Charge (PM 36 of 2014 on Procedures and Procedures for Imposing Airport Service Tariffs, 2014).

Airports generate revenue from several services provided to their users, referred to as aeronautical and non-aeronautical revenue. The purpose of this revenue is to serve as a source of income prepared to ensure the availability of safe, comfortable, and complete facilities and services at the airport. With this revenue, airport management continuously improves, routinely monitors, and enhances services that can elevate the status of an airport. To ensure the above services, airport revenue (aeronautical and non-aeronautical) must be supported.

Airport revenue is a crucial aspect of an airport's economy, as it influences the development of facilities, services, and infrastructure at the airport. Therefore, reviewing airport revenue is essential for the coming years to assess the progress of the airport's revenue.

The background described indicates that the projection of passenger numbers at Halu Oleo Airport up to the year 2045 will have a significant impact on revenue, particularly in the Passenger Service Charge (PJP2U) sector and check-in counter facilities. Therefore, the author has taken the initiative to undertake a final project titled "Projection of Passenger Numbers in 2045 on Revenue from Passenger Service Charges (PJP2U) and Check-in Counter at Halu Oleo Airport, Kendari." This projection is expected to serve as an effective tool to increase airport revenue and as a basis for planning and formulating future policies. With accurate projections, it is hoped that future policy decisions can be made more precisely.

Based on this background, several issues need to be further examined. First, how can we calculate the predicted number of passengers at Halu Oleo Airport in 2045? Second, what will be the increase in revenue by 2045 from Passenger Service Charges (PJP2U) and check-in counter services at Halu Oleo Airport, Kendari? Third, how can the calculated results of PJP2U revenue and check-in counter services for the year 2045 be projected in the form of a graph? These questions form the core of the research to be conducted, aiming to provide a clear and in-depth overview of future revenue projections.

2. METHOD

2.1 Research Design

Research methodology is a series of steps undertaken by a researcher to systematically gather information or data. These methods can be qualitative, quantitative, or a combination of both, and provide an overview of the research design, including the procedures and steps to be taken, the research timeline, data sources, as well as the methods for obtaining, processing, and analyzing the data. The purpose of using research methodology is to obtain valid and reliable data, ensuring that the research results can be justified and accepted by many. There are various types of research methods, such as surveys, action research, applied research, and others, which are selected based on the nature of the research being conducted.

According to the definition from the Great Dictionary of the Indonesian Language (Kamus Besar Bahasa Indonesia), research involves the collection, processing, analysis, and presentation of information systematically and objectively to solve problems, test hypotheses, and develop general principles. Based on these various definitions, it can be concluded that research methodology is an effort to study problems carefully and thoroughly using scientific methods, allowing for the systematic and objective collection, processing, analysis, and drawing of conclusions from data to solve core issues and test hypotheses.

This research itself is descriptive quantitative research, which involves data collection and describing or explaining something as it is, based on observable phenomena using numerical data. The descriptive method with a quantitative approach aims to systematically and factually describe the facts and relationships between the investigated variables. According to Sugiyono (2017), descriptive analysis methods are used to analyze data by describing or illustrating the collected data without intending to draw general conclusions or generalizations.

Furthermore, this research has several characteristics that are rational, empirical, and systematic. The rational characteristic means that the research is conducted in a way that can be logically accepted and understood by human reasoning. Empirical means that the research can be carried out by relying on human senses, so it can be indirectly observed. Meanwhile, systematic means that the research is conducted using a logical and orderly method. The primary goal of this research is to enhance the researcher's knowledge and understanding, thus necessitating a research method that is logical, empirical, and systematic to ensure that the data obtained is valid according to the conditions in the field. Researchers must also include data related to the problem being addressed so that it can be resolved effectively and efficiently.

2.2 Research Variable

This research includes various variables that will be studied and are interrelated. Variables are defined as the objects of research that become factors in the events or phenomena being studied. Generally, research variables are constructs or traits that are studied and have varying values. Variables can also be understood as symbols or values assigned a specific number. There are several types of variables in research, namely independent and dependent variables, active and attribute variables, as well as continuous and categorical variables (Kerlinger, 2006 in Anxiety et al., 2022). Essentially, research variables are anything determined by the researcher to be studied to obtain information and draw conclusions. In this research, the author uses two types of variables, namely independent and dependent variables, according to Sugiyono (2012). The independent variable, quoted from the UPI Education repository, is a variable that influences or causes changes in the dependent variable. Meanwhile, the dependent variable is the variable that is influenced or is the result of the independent variable.

In this study, the independent variable (Variable X) is the prediction of the number of passengers for the next

21 years at Halu Oleo Airport in 2045, while the dependent variable (Variable Y) is the amount of revenue from PJP2U and the check-in counter at Halu Oleo Airport, Kendari. The object of this research is the amount of revenue from the Passenger Service Charges (PJP2U) and the check-in counter at Halu Oleo Airport, Kendari. This study will predict the number of passengers and revenue in 2045, which will then be projected in the form of graphs to facilitate readers in understanding the results.

2.3 Data Collection Techniques and Research Instrumnets

Data collection techniques and research instruments are crucial components of a study. The method used in this research is descriptive. Descriptive research is employed to depict the actual events in the field, formulate problems, collect data, analyze data to answer those problems, draw conclusions, and compile the research report. Several data collection techniques used in this study include data collection from Halu Oleo Airport Kendari, literature review, and historical data analysis. The data from the airport includes air traffic information such as the number of passenger movements, aircraft, cargo, and mail from 2014-2018, which is then analyzed using linear regression with Microsoft Excel and SPSS. Additionally, the literature review involves using relevant sources and other data as the theoretical foundation, including applicable regulations such as Law Number 1 of 2009 on Aviation and Annex 14 Aerodrome ICAO. Historical data analysis is also conducted using data provided by Halu Oleo Airport Class I, which is necessary for planning calculations and revenue projections up to 2045.

Research instruments are tools used by researchers to collect quantitative information about the variation of characteristics of variables objectively. Research instruments are used to record the state and activities of psychological attributes, which can technically be categorized into cognitive and non-cognitive attributes. According to Sumadi, cognitive attributes are stimulated through questions, while non-cognitive attributes are stimulated through statements. Thus, research instruments can be defined as tools for collecting, examining, investigating, processing, analyzing, and presenting data systematically and objectively with the aim of solving a problem or testing a hypothesis. Any tool that supports research can be referred to as a research instrument.

2.4 Data Analysis Techniques

The method used in analyzing this Final Project is descriptive quantitative. According to Sudjana and Ibrahim (2004:64) in (Jayusman & Shavab, 2020), descriptive research is research that attempts to describe a phenomenon, event, or occurrence that is happening at the present time. Meanwhile, the quantitative approach, as explained by (Jayusman & Shavab, 2020), is used because it involves numbers, starting from data collection, data interpretation, and the results.

The data analysis used to process the data is supported by SPSS (Software Package for the Social Sciences). SPSS is software that is useful for processing quantitative data, offering advanced statistical analysis, integration with big data, and seamless application implementation (SPSS, 2023). SPSS is an application used for advanced statistical analysis, data analysis with machine learning algorithms, string analysis, and big data analysis that can be integrated to build a data analysis platform (Bulu & Nahak, 2021).

The author uses Microsoft Excel to input the data generated by SPSS, which is then used to create tables and calculate projections with the applicable rates for the next 21 years. This is due to the reference data for the forecasting calculations showing an average increase of 18%. The data in question is passenger movement data, which has shown an increase over the last 5 years, specifically from 2014-2018.

2.5 Research Location and Time

This research was conducted at Halu Oleo Class 1 Airport, located at Jl. Bandara Halu Oleo, Ambaipua, Ranomeeto District, South Konawe Regency, Southeast Sulawesi. The coordinates of Halu Oleo Class 1 Airport Kendari are $4^{\circ} 4' 53.79''$ S 122° 25′ 05.63″ E. The detailed location of Halu Oleo Class 1 Airport Kendari can be seen in Figure 3.2.

This research began during the On The Job Training (OJT) period, which took place from December 2023 to March 1, 2024.

3. RESULT AND DISCUSSION Data Analysis

Several outputs that have been generated were then analyzed according to the simple linear regression criteria. The following are some of the results produced as data processing output, consisting of four types of outputs, which are explained in the figures below:

Variables Entered/Removed ^a					
Model	Variables Entered	Variables Removed	Method		
1	TAHUN ^b		Enter		
a. Dependent Variable: JUMLAH PENUMPANG					
b. All requested variables entered.					

Figure 1. Output Results of Variables Entered/Removed
The output results for VariablesEntered/Removed show that the X variable (Year) is the
variable that was included, and the method used was the
Enter method.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.983 ^a	.967	.956	33703.103

Figure 2. Output Results of Model Summary

The R column in the Model Summary table is the correlation coefficient (0.983), which indicates a high level of correlation between the variables of cadmium concentration and survival rates. The Model Summary output shows that the correlation (R) is 0.983. Additionally, R², the coefficient of determination, shows the percentage of influence of the independent variable on the dependent variable. In this case, the R² value is 0.967 or 96.7%.

		F	NOVAa			
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.971E+10	1	9.971E+10	87.782	.003
	Residual	3407697489	3	1135899163		
	Total	1.031E+11	4			

Figure 3. Output Results of ANOVA

The ANOVA output explains that there is a significant influence between the Year variable (X) and

the Passenger Number variable (Y), where the F statistic obtained is 87.782 with a significance level of 0.003 < 0.005, so the regression model can be used to predict the number of passengers.

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		в	Std. Error	Beta	t	Sig.
1	(Constant)	-200695642	21486245.04		-9.341	.003
	TAHUN	99855.600	10657.857	.983	9.369	.003

Figure 4. Output Results of Coefficients

The Coefficients output provides an overview of the regression equation being sought, where the value of a is shown in the B constant column as -200,695,642, and the value of b is shown in the B Year column as 99,855.600, which can be rounded to 99,855.6. Thus, the regression equation can be written as:

 $\mathbf{Y} = \mathbf{a} + \mathbf{B}\mathbf{x}$

Y = -200,695,642 + 99,855.6 X

When interpreted, the equation indicates that the constant value of the passenger number variable is -200,695,642. Meanwhile, the regression coefficient for the year (X) is 99,855.6, which means that for every 1% increase in the year value, the passenger number will increase by 99,855.6. Since the obtained regression value is positive, the influence of the X variable on Y is also positive.

Fundamental Analysis for Decision-Making

In conducting a fundamental analysis for decisionmaking, it is essential first to compare the significance value with the standard probability value of

0.05. This step is crucial as it helps determine the impact of one variable on another. Specifically, if the significance value obtained is less than 0.05, it indicates that variable X has a statistically significant influence on variable Y. On the other hand, if the significance value exceeds 0.05, it suggests that variable X does not have a significant impact on variable Y. From the results obtained, particularly from the ANOVA output and the Coefficients output, the significance value is found to be

0.003. Since this value is well below the threshold of 0.05, it can be concluded that variable X does indeed significantly influence variable Y. This finding sets the foundation for further analysis and interpretation of the data.

The subsequent step in the decision-making process involves comparing the calculated t-value with the critical t-value from the t-distribution table. This comparison is vital in ascertaining whether the independent variable, which in this case is the Year (X), has a significant effect on the dependent variable, namely the Number of Passengers (Y). Based on the Coefficients output, the calculated t-value is 9.369. To determine the critical t-value from the t-distribution table, several data points must be considered: the number of variables (k) is 2, the sample size (n) is 5, and a commonly used significance level (α) is 0.025. The degrees of freedom (df) are calculated as n - k, which equals 3. By referencing the t-distribution table, the critical t-value for df = 3 at α = 0.025 is determined to be 3.182. Given that the calculated t-value (9.369) exceeds the critical t-value (3.182), it can be confidently concluded that variable X has a significant influence on variable Y. This conclusion is critical as it justifies the predictive analysis conducted in this study.

Moving forward, the discussion delves into the forecasted number of passengers at Halu Oleo Airport, Kendari, from 2024 to 2045. The predictions, as shown in Table 4.2, indicate a consistent increase in the number of passengers over the years. The data suggests that the number of passengers will grow from 1,412,902 in 2024 to 3,509,878 in 2045. This growth represents a substantial increase of nearly 150% over the 21-year period. Such an increase is significant as it implies a steadily growing demand for air travel services at the airport, which in turn could lead to increased revenue generation and necessitate further development and expansion of the airport's facilities to accommodate the growing number of passengers.



Figure 5. The increase in the number of passengers from 2019 to 2045

The forecasted growth in passenger numbers is graphically represented in Figure 5, which provides a visual representation of the projected increase in passenger traffic at Halu Oleo Airport over the period from 2024 to 2045. The graph clearly shows a continuous upward trend, reflecting the positive growth in passenger numbers year after year. This growth is not only indicative of the increasing demand for air travel but also highlights the need for strategic planning and investment in the airport's infrastructure and services to meet this demand effectively.

and infrastructure, ensuring that the airport can continue to provide high-quality services to its passengers.

Tahun Penumpang Berangkat Tarif PJP2U Proyeksi Pendapatan 2024 1.412.902 Rp. 55.000 Rp. 77.709.610.000 2025 1.512.758 Rp. 55.000 Rp. 83.201.690.000 Rp. 55.000 Rp. 88.693.770.000 2026 1.612.614 2027 1.712.470 Rp. 55.000 Rp. 94.185.850.000 2028 1.812.326 Rp. 55.000 Rp. 99.677.930.000 2029 1.912.182 Rp. 55.000 Rp. 105.170.010.000 Rp. 55.000 Rp. 110.662.090.000 2030 2.012.038 2031 2.111.894 Rp. 55.000 Rp. 116.154.170.000 Rp. 55.000 2032 2.211.750 Rp. 121.646.250.000 Rp. 55.000 Rp. 127.138.330.000 2033 2.311.606 2034 2.411.462 Rp. 55.000 Rp. 132.630.410.000 2035 2.511.318 Rp. 55.000 Rp. 138.122.490.000 2036 2.611.174 Rp. 55.000 Rp. 143.614.570.000 2037 Rp. 55.000 Rp. 149.106.650.000 2.711.030 Rp. 55.000 2038 2.810.886 Rp. 154.598.730.000 2039 2.910.742 Rp. 55.000 Rp. 160.090.810.000 2040 3.010.598 Rp. 55.000 Rp. 165.582.890.000 Rp. 55.000 Rp. 171.074.970.000 3.110.454 2041 Rp. 55.000 Rp. 176.567.050.000 2042 3.210.310 2043 3.310.166 Rp. 55.000 Rp. 182.059.130.000 2044 3.410.022 Rp. 55.000 Rp. 187.551.210.000 2045 3.509.878 Rp. 55.000 Rp. 193.043.290.000

In addition to predicting the number of passengers, the discussion also explores the projected revenue from Passenger Service Charges (PJP2U) at Halu Oleo Airport for the same period. Table 1. outlines the anticipated revenue, calculated by multiplying the predicted number of departing passengers by the current PJP2U tariff of Rp. 55,000. The projections indicate a significant increase in revenue, from Rp. 77,709,610,000 in 2024 to Rp. 193,043,290,000 in 2045. This represents an almost 300% increase in PJP2U revenue over the 21year period, underscoring the financial importance of PJP2U as a major revenue stream for the airport. The substantial growth in PJP2U revenue is expected to contribute significantly to the airport's financial stability and its ability to fund ongoing and future infrastructure projects.



Figure 6. Projected PJP2U Revenue

The projected increase in PJP2U revenue is further illustrated in Figure 6, which provides a graphical representation of the anticipated revenue growth. The graph clearly demonstrates a strong upward trend, reflecting the expected increase in revenue as passenger numbers rise. This projected growth in PJP2U revenue is crucial for the airport as it provides a reliable source of income that can be reinvested into the airport's operations

Tabel 2. Projected Revenue from Check-in Counter

	Penumpang	Tarif Pemakaian Check in	Proveksi
Tahun	Berangkat	Counter	Pendapatan
2024	1.412.902	Rp. 1.450	Rp. 2.048.707.900
2025	1.512.758	Rp. 1.450	Rp. 2.193.499.100
2026	1.612.614	Rp. 1.450	Rp. 2.338.290.300
2027	1.712.470	Rp. 1.450	Rp. 2.483.081.500
2028	1.812.326	Rp. 1.450	Rp. 2.627.872.700
2029	1.912.182	Rp. 1.450	Rp. 2.772.663.900
2030	2.012.038	Rp. 1.450	Rp. 2.917.455.100
2031	2.111.894	Rp. 1.450	Rp. 3.062.246.300
2032	2.211.750	Rp. 1.450	Rp. 3.207.037.500
2033	2.311.606	Rp. 1.450	Rp. 3.351.828.700
2034	2.411.462	Rp. 1.450	Rp. 3.496.619.900
2035	2.511.318	Rp. 1.450	Rp. 3.641.411.100
2036	2.611.174	Rp. 1.450	Rp. 3.786.202.300
2037	2.711.030	Rp. 1.450	Rp. 3.930.993.500
2038	2.810.886	Rp. 1.450	Rp. 4.075.784.700
2039	2.910.742	Rp. 1.450	Rp. 4.220.575.900
2040	3.010.598	Rp. 1.450	Rp. 4.365.367.100
2041	3.110.454	Rp. 1.450	Rp. 4.510.158.300
2042	3.210.310	Rp. 1.450	Rp. 4.654.949.500
2043	3.310.166	Rp. 1.450	Rp. 4.799.740.700
2044	3.410.022	Rp. 1.450	Rp. 4.944.531.900
2045	3.509.878	Rp. 1.450	Rp. 5.089.323.100

The analysis also examines the projected revenue from the usage of check-in counters at Halu Oleo Airport, as outlined in Table 2. According to the Indonesian Ministry Finance Regulation of Number 163/PMK.05/2018, the tariff for check-in counter usage is set at Rp. 1,450 per passenger. The projections show a steady increase in revenue from check-in counter usage, which rises from Rp. 2,048,707,900 in 2024 to Rp. 5,089,323,100 in 2045. This growth in revenue from check-in counter usage aligns with the predicted increase in passenger numbers, further contributing to the airport's overall revenue stream. The steady increase in this revenue source highlights the importance of operational efficiency and customer service at the check-in counters, as these areas directly impact passenger experience and satisfaction.



Figure 7. Projected Revenue from Check-in Counter Usage

The projected revenue growth from check-in counter usage is also graphically represented in Figure 7

Tabel 1. Projected PJP2U Revenue for 2024-2045

which illustrates the steady upward trend in this revenue stream. The graph highlights the positive financial outlook for the airport, as the consistent growth in checkin counter revenue complements the overall increase in PJP2U revenue. Together, these revenue streams provide a solid financial foundation for the airport, enabling it to plan and execute necessary improvements and expansions to its facilities and services.

Tabel 3. Total Revenue from PJP2U and Check-inCounter Usage

		Proyeksi Pendapatan	
Tahun	Penumpang berangkat	(PJP2U dan Check in Counter)	
2024	1.412.902	Rp. 79.758.317.900	
2025	1.512.758	Rp. 85.395.189.100	
2026	1.612.614	Rp. 91.032.060.300	
2027	1.712.470	Rp. 96.668.931.500	
2028	1.812.326	Rp. 102.305.802.700	
2029	1.912.182	Rp. 107.942.673.900	
2030	2.012.038	Rp. 113.579.545.100	
2031	2.111.894	Rp. 119.216.416.300	
2032	2.211.750	Rp. 124.853.287.500	
2033	2.311.606	Rp. 130.490.158.700	
2034	2.411.462	Rp. 136.127.029.900	
2035	2.511.318	Rp. 141.763.901.100	
2036	2.611.174	Rp. 147.400.772.300	
2037	2.711.030	Rp. 153.037.643.500	
2038	2.810.886	Rp. 158.674.514.700	
2039	2.910.742	Rp. 164.311.385.900	
2040	3.010.598	Rp. 169.948.257.100	
2041	3.110.454	Rp. 175.585.128.300	
2042	3.210.310	Rp. 181.221.999.500	
2043	3.310.166	Rp. 186.858.870.700	
2044	3.410.022	Rp. 192.495.741.900	
2045	3.509.878	Rp. 198.132.613.100	

Finally, Table 3. presents the total projected revenue from both PJP2U and check-in counter usage at Halu Oleo Airport for the years 2024 to 2045. The total projected revenue shows a continuous increase, rising from Rp. 79,758,317,900 in 2024 to Rp. 198,132,613,100 in 2045. This substantial increase in total revenue reflects the combined impact of growing passenger numbers and stable tariffs, which together contribute to the airport's financial growth and sustainability. The significant increase in total revenue is expected to support the airport's operational needs and provide the necessary funds for future infrastructure development and service improvements.



Figure 8. Total Revenue from PJP2U and Checkin Counter Usage

The overall trend in total projected revenue is depicted in Figure 4.13, which graphically represents the combined revenue from PJP2U and check-in counter usage. The graph's upward trajectory underscores the robust financial future for Halu Oleo Airport, supported by the consistent increase in passenger traffic and the associated revenue streams. This positive financial outlook is crucial for the airport as it provides the resources needed to maintain and enhance its operations, ensuring that it can continue to meet the needs of its passengers and contribute to the economic development of the region.

In conclusion, the analysis reveals that the projected increase in passenger numbers will have a direct impact on the airport's revenue, particularly in terms of PJP2U and check-in counter usage. This increase in revenue is expected to provide the airport with a strong financial foundation, enabling it to invest in necessary infrastructure improvements and service enhancements. As the airport continues to grow, it will be essential to plan strategically and allocate resources effectively to ensure that it can meet the growing demand for air travel services. The predicted revenue growth also highlights the importance of effective management and operational efficiency, as these factors will play a critical role in the airport's ability to sustain its growth and provide high-quality services to its passengers. By maintaining a focus on strategic planning and investment, Halu Oleo Airport can continue to thrive and contribute to the broader economic development of the region, positioning itself as a key hub for air travel in Southeast Sulawesi and beyond.

4. CONCLUSION

BASED on the passenger forecast results up to the year 2045, Halu Oleo Airport in Kendari is expected to experience a significant increase in the number of passengers. This increase will also impact the revenue generated from Passenger Service Charges (PJP2U) and the usage of check-in counters. The analysis derived from the passenger forecasting leads to several conclusions. Firstly, the passenger growth forecast predicts that by 2045, the number of departing passengers will reach 3,509,878. Secondly, the projected revenue from PJP2U in 2045 is expected to be Rp. 193,043,290,000, while the revenue from check-in counter usage is predicted to be Rp. 5,089,323,100. This brings the total projected revenue from both PJP2U and check-in counter usage to Rp. 198,132,613,100 in 2045. Lastly, the graphical projections for passenger numbers and revenue from PJP2U over the period from 2024 to 2045 show a consistent annual increase in passenger numbers, which in turn influences the revenue from both PJP2U and check-in counter usage.

Based on the research findings, several recommendations for development steps can be made. Firstly, the passenger growth forecast for the 21-year period up to 2045 should be used as a reference by the

airport management to prepare for the necessary facility enhancements and expansions at Halu Oleo Airport's terminal. Secondly, it is recommended that the airport continues to develop its facilities and services sustainably in line with the predicted passenger growth. This increase in passenger numbers will directly impact the need for improved facilities and enhanced services at Halu Oleo Airport. Lastly, for future researchers, it is suggested to further develop forecasting methods, considering key forecasting principles. It is important to account for the fact that forecasting generally assumes that past trends will continue into the future, barring any unforeseen events such as the COVID-19 pandemic or natural disasters that are beyond human control.

REFERENCES

- [1] Annex 14 Volume I Aerodrome Design and Operations (2016).
- [2] Anxiety, C. B., Efficiacy, S., Stress, W., Of, L., Students, P. A. I., Iain, O. F., Nurjati, S., To, C., & Examination, F. (2022). Dengan Tingkat Stress Mahasiswa Pai Iain Syekh Nurjati Cirebon Dalam Menghadapi Ujian. 5(1), 414–423.
- [3] Asman, S., & Wakhidah, E. N. (2022). Analisis Fasilitas pada Terminal Keberangkatan di Masa Pandemi Covid-19 (Studi di Bandar Udara Rahadi Oesman Ketapang). 6(2), 5162–5173.
- [4] Bulu, V. R., & Nahak, R. L. (2021). Pelatihan pengolahan dan analisis data menggunakan spss. 1(1), 1–4.
- [5] Direktorat Jendral Perhubungan Udara. (1985). SKEP 100 Tahun 1985 Peraturan dan Tata Tertib Bandara. Direktorat Jendral Perhubungan Udara.
- [6] Direktorat Jendral Perhubungan Udara. (2015). KP 59 Tahun 2015 Perubahan Atas Peraturan Direktur Jendral Perhubungan Udara Nomor KP 12 Tahun 2015 Tentang Pembayaran Passenger Service Charge (PSC) Disatukan Dengan Tiket Penumpang Pesawat Udara. Kementrian Perhubungan.
- [7] Ismi Ramadina, I., & Firmansyah. (2020). Pengaruh Motivasi Dan Disiplin Kerja terhadap Produktivitas Karyawan pada PT. Nusa Surya Ciptadana Kota Sukabumi. Jurnal Mahasiswa Manajemen, 1(2), 185–204. https://journal.stiepasim.ac.id/index.php/JMM/articl

e/view/177

- [8] Jayusman, I., & Shavab, O. A. K. (2020). Aktivitas Belajar Mahasiswa Dengan Menggunakan Media Pembelajaran Learning Management System (Lms) Berbasis Edmodo Dalam Pembelajaran Sejarah. *Jurnal Artefak*, 7(1), 13. https://doi.org/10.25157/ja.v7i1.3180
- [9] Kementerian Perhubungan. (2015). PM 77 Tahun 2015 Standarisasi dan Sertifikasi Fasilitas Bandar Udara. Menteri Perhubungan.

- [10] Kementrian Perhubungan. (2015). PM 38 TAHUN 2015 Standar Pelayanan Penumpang Angkutan Udara Dalam Negeri. Kementrian Perhubungan.
- [11] Kotler, P., & Armstrong, G. (2008). Kotler, 2008. In *Prinsip-Prinsip Pemasaran.*
- [12] Mahardita, H. R. (2017). Efektivitas dan efisiensi kerja aparatur sipil negara di sekretariat dprd provinsi Kalimantan Timur. *EJournal Ilmu Pemerintahan*, 5(1), 133–144. https://ejournal.ip.fisip-unmul.ac.id/site/wp-content/uploads/2017/02/Hayuning Rizki Mahardita (02-10-17-02-37-33).pdf
- [13] Menteri Keuangan. (2018). 163/PMK.06/2018 Tarif Layanan Badan Layanan Umum Unit Penyelenggara Bandar Udara Mutiara Sis Al-Jufri Palu Pada Kementrian Perhubungan. Menteri Keuangan.
- [14] Menteri Perhubungan. (1999). KM 29 Tahun 1998 Tentang Mekanisme Penetapan Tarif dan Formulasi PerhitunganTarif Pelayanan Jasa Kebandarudaraan Pada Bandar Udara yang Diselenggarakan Oleh Badan Usaha Kebandarudaraan. Menteri Perhubungan.
- [15] Menteri Perhubungan. (2014). PM 36 Tahun 2014 Tata Cara dan Prosedur Pengenalan Tarif Jasa Kebandarudaraan. Menteri Perhubungan.
- [16] Menteri Perhubungan. (2015). PM 179 Tahun 2015 Tentang Perubahan Atas Peraturan Menteri Perhubungan Nomor PM 36 Tahun 2014 Tata Cara dan Prosedur Pengenaan Tarif Jasa Kebandarudaraan. Menteria Perhubungan.
- [17] Menteri Perhubungan. (2015). PM 185 Tahun 2015 Standar Pelayanan Penumpang Kelas Ekonomi Angkutan Udara Niaga Berjadwak Dalam Negeri. Menteri Perhubungan.
- [18] Menteri Perhubungan. (2016). PM 103 Tahun 2016 Standar Pelayanan Pada Kantor Unit Penyelenggara Bandar Udara Halu Oleo Kendari. Menteri Perhubungan.
- [19] Menteri Perhubungan. (2016). PM 81 Tahun 2016 Petunjuk Pelaksanaan Jenis dan Tarif Atas Penerimaan Negara Bukan Pajak yang Berlaku Pada Direktorat Jenderal Perhubungan Udara. Menteri Perhubungan.
- [20] Mudick, Robert G., Russell, Roberta S. (1990). Service operations management Robert G. Murdick, Barry Render [and] Roberta S. Russell. Boston: Allyn & Bacon.
- [21] Neneng, L. N., Sukarman, K., Ai, D., & Eni, M. (2014). Pengelolaan Tata Air Lahan Gambut, Panduan Pengelolaan Berkelanjutan Lahan Gambut Terdegradasi (Issue July 2020).
- [22] Pendi, P. (2016). *Kupas Tuntas Penerbangan*. Deepublish.

- [23] Putramasi Hintarsyah, A., Christy, J., & Leslie Hendric Spits Warnars, H. (2018). Forecasting Sebagai Decision Support Systems Aplikasi Dan Penerapannya Untuk Mendukung Proses Pengambilan Keputusan. Jurnal Sistem Komputer, 8(1), 2252–3456.
- [24] Putri, C. Y., Hartono, S., & Aryati, I. (2019). Analisis Rasio Keuangan Pada Pt Sri Rejeki Isman Tbk Tahun 2015 – 2017. Jurnal Ilmiah Edunomika, 3(01), 1–13. https://doi.org/10.29040/jie.v3i01.407
- [25] Renova Inriani Situmeang, Sahat Simatupang, & Sriayu Aritha Panggabean. (2022). Analisis Pengembalian Pinjaman Terhadap Peningkatan Pendapatan Usaha Koperasi Simpan Pinjam (Ksp) Satahi Suga-Suga Kabupaten Tapanuli Tengah. Jurnal Ekonomi Bisnis Dan Akuntansi, 2(3), 80–87. https://doi.org/10.55606/jebaku.v2i3.609
- [26] Republik Indonesia. (2009). UU Nomor 1 Tentang Penerbangan (p. 255). Presiden Republik Indonesia.
- [27] Ristiani, I. Y., Manajemen, K., Mal, D., & Publik, P. (2020). Manajemen Pelayanan Publik Pada Mall Pelayanan Publik di Kabupaten Sumedang Provinsi Jawa Barat. X(2), 165–178.
- [28] Rizky, A. N. (2021). Program Dinamik Pada Perencanaan Produksi Dan Pengendalian Persediaan. 03(01), 14–18.
- [29] Rizkyaulia, A., & Haryono, J. M. T. (2020). Pengaruh Penerapan Pengakuan Pendapatan berdasarkan PSAK 72 Terhadap Kualitas Laba pada Perusahaan Properti, Real Estat, dan Konstruksi Bangunan yang Terdaftar di Bursa Efek Indonesia.
- [30] Satyarini, R. (2007). Menentukan Metode Peramalan yang Tepat. *Bina Ekonomi Majalah Ilmiah Fakultas Ekonomi Unpar*, *11*, 59–70.
- [31] Septian, D. A. (2020). Analisis Pengaruh Pendapatan Pelayanan Jasa Penumpang Pesawat Udara (PJP2U) Pada Masa Pandemi Covid-19 Terhadap Operasional Bandar Udara Kalimarau Berau. 4(2), 253–260.
- [32] Sumantri, I. H., Sumantri, I. H., Pegawai, K., Dalam, P., Masyarakat, K., Puskesmas, D., Inap, R., Makroman, K., Sambutan, K., & Samarinda, K. (2015). Kinerja pegawai puskesmas dalam pelayanan kesehatan masyarakat di puskesmas rawat inap kelurahan makroman kecamatan sambutan kota samarinda. 1, 201–211.
- [33] Winarsih, A. S. (2005). Manajemen pelayanan: pengembangan model konseptual, penerapan "Citizen's Charter" dan standar pelayanan minimal. Pustaka Pelajar.