



Research Example for Business Students: Analysis of the Number of Passengers Departing on Domestic and International Flights at 4 Main Indonesian Airports in 2014-2018

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ABSTRACT

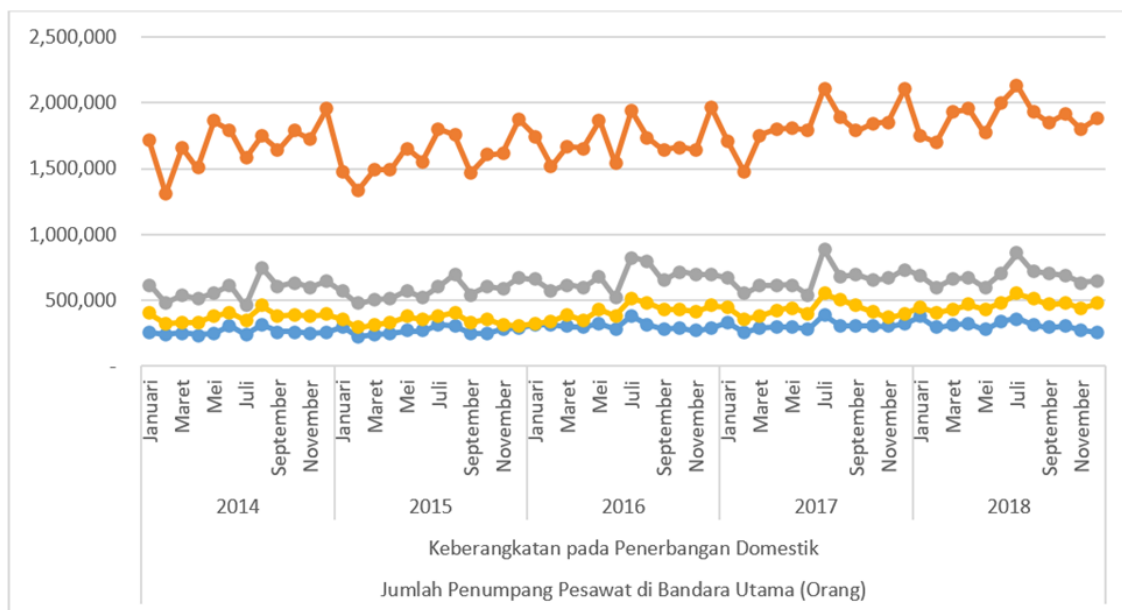
This study aims to analyze the number of passengers departing on domestic flights and international flights at 4 main Indonesian airports in 2014-2018. This study also aims to provide simple examples of research to students in faculties and/or business majors, so that student research becomes more varied. This study used a hypothesis test of the proportion of 2 samples with a 5% alpha confidence level. Test-of-difference analysis is also used to make the research more comprehensive. Then the analysis continued with descriptive analysis. Based on data on the number of passengers on domestic and international flights, it can be analyzed with the result that there are differences in the number of passengers between domestic and international flights. This research can be the basis for further in-depth research on the factors that affect the number of passengers at certain airports. Further research can identify other aspects that can influence passenger decisions in choosing airports and flight routes, such as ticket prices, service quality, and consumer preferences. This research can also be developed using other statistical tools such as ANOVA or other statistical test tools.

Keywords: Research Example, Business Students, Flights, Airports

INTRODUCTION

Transportation (Kalemba & Campa-Planas, 2018) is the movement of people or goods from one place to another using a vehicle driven by humans or machines. Transportation (John, 2020) is used to make it easier for humans to carry out their daily activities. In developed countries, they usually use the subway (subway) and taxis. Residents there rarely have private vehicles because they mostly use public transportation as their transportation. Transportation itself is divided into 3 namely, land, sea and air transportation. Air transportation is transportation that requires a lot of money to use it. Apart from having more sophisticated technology, air transportation is the fastest means of transportation compared to other means of transportation and has a relatively lower accident rate than land and water transportation.

Based on data from the Indonesian Statistics Agency from 2014 to 2016, the number of passengers departing on domestic flights at Indonesia's 4 main airports is as follows:



— Polonia — Soekarno Hatta — Juanda — Ngurah Rai

Source: Indonesian Statistics Agency, 2019

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LITERATURE REVIEW

Transportation Economics Theory

Transport Economics Theory is a branch of economics that studies the behavior and interactions between demand and supply in the transportation sector, including aviation (Kockelman et al., 2013). This theory investigates how factors such as ticket prices, consumer income, fuel prices, choice of mode of transportation, economic conditions, and other factors affect the number of passengers who choose to take domestic or international flights.

Comparative Accounting Theory

Comparative Theory of Accounting is a field within accounting that focuses on the comparison and analysis of differences in accounting practices between different entities or organizations. In the context of your research, this theory will help you understand how the accounting systems used by airports and airlines differ from one another, and how information about passenger numbers and related financial data is processed and presented in their financial reports.

Inferential Statistics

Inferential Statistics Method is a branch of statistics that is used to draw conclusions or make predictions about populations based on a limited sample of data. In this study, the number of passengers on domestic and international flights at 4 main Indonesian airports from 2014 to 2018, will use inferential statistical methods to make generalizations about the total number of passengers based on sample data.

METHODOLOGY

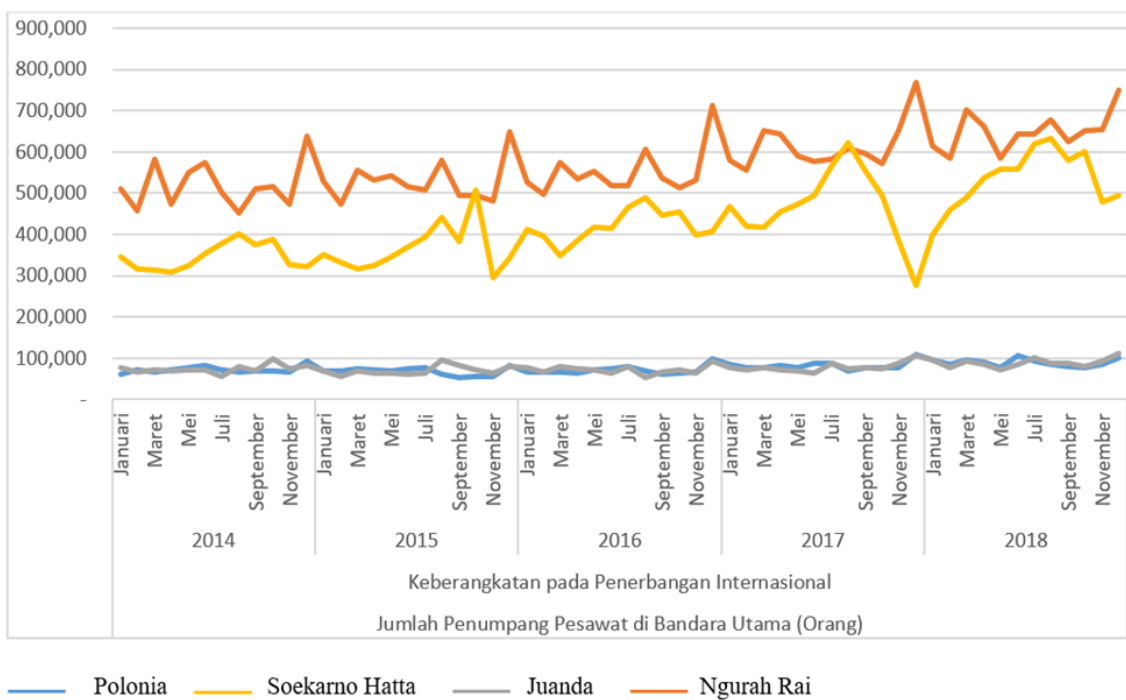
This research includes quantitative research (Sekaran & Bougie, 2016). The data used is secondary data obtained from the Central Bureau of Statistics. This study used a hypothesis test of the proportion of 2 samples (Lind et al., 2018) with an alpha confidence level of 5%. Test-of-difference analysis is also used to make the research more comprehensive. Then the analysis continued with descriptive analysis.

RESULTS AND DISCUSSION

From these data it can be seen that the number of passengers is greater at Ngurah Rai airport. Based on the analysis of the 2-sample Proportion Hypothesis Test, there are differences in the number of passengers at the 4 main airports in Indonesia with the results $X^2 = 7.815$ and $X^2 \text{ count} = 103,791,127$ where $\alpha = 5\%$, $f_0 =$ number of passengers from 2014 to 2018.

Based on an article from the Ministry of Home Affairs, the Department of Transportation said that Ngurah Rai Airport is the safest airport. So, it's not surprising, the number of passengers is higher than the other 3 airport samples. Apart from being the safest airport, the location of Ngurah Rai airport is also an influence, which is located in Bali. Bali is the prima donna of Indonesian tourism which is well known in the world. Besides being famous for its natural beauty, especially its beaches, Bali is also famous for its unique and interesting arts and culture. The tourism industry is centered in South Bali and in several other areas.

Apart from domestic flights, based on data from the Indonesian Statistics Agency from 2014 to 2016, the number of passengers departing on international flights at Indonesia's 4 main airports is as follows:



Source: Indonesian Statistics Agency, 2019

From the data above it can be seen that the number of passengers between Juanda and Polonia airports is not true, that there is a difference in numbers. This is based on the analysis of the paired difference test where $t \text{ count} = -0.3442$. While the number of passengers between Soekarno Hatta and Ngurah Rai airports, it is true that there are differences in numbers. This opinion is based on the analysis of paired different tests with $t \text{ count} = 13.988$.

Discussion

Differences in the Number of Passengers at Juanda and Polonia Airports

Based on the results of the analysis, it was found that there was no significant difference between the number of passengers at Juanda and Polonia airports. This means that during the time period studied, both Juanda and Polonia airports had a relatively similar number of passengers. This shows that these two airports have a comparative attractiveness for passengers on domestic and international flights. On the business aspect, this could indicate that the market at these two airports is quite balanced and able to attract a consistent number of passengers.

Differences in the Number of Passengers at Soekarno Hatta and Ngurah Rai Airports

The analysis shows that there is a significant difference between the number of passengers at Soekarno Hatta and Ngurah Rai airports. In the same period, Soekarno Hatta airport attracted a higher number of passengers compared to Ngurah Rai airport. Factors such as geographical location, connectivity, local population and tourism attractiveness may play a role in this difference. From a business perspective, this shows that Soekarno Hatta airport has a bigger market potential and stronger traction in attracting the number of passengers.

CONCLUSION

Conclusion

Based on data on the number of passengers on domestic and international flights, it can be analyzed with the result that there are differences in the number of passengers between domestic and international flights.

Implications

The management of Ngurah Rai airport needs to consider resource allocation and infrastructure development to increase its carrying capacity so that it is more competitive in attracting passengers. Meanwhile, Soekarno Hatta airport needs to continue to optimize its facilities and services to maintain its position as the busiest airport in Indonesia. Airport managers to develop more effective marketing strategies to attract passengers from a wider area, including strengthening partnerships with airlines and destinations.

Recommendation

This research can be the basis for further in-depth research on the factors that affect the number of passengers at certain airports. Further research can identify other aspects that can influence passenger decisions in choosing airports and flight routes, such as ticket prices, service quality, and consumer preferences. This research can also be developed using other statistical tools such as ANOVA or other statistical test tools.

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