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Profitability Analysis of Jakarta–Makassar Round-Trip Route Using Garuda B737-800NG Aircraft in 2019

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Abstract

Purpose: This study analyzes the profitability of the CGK–UPG round-trip route operated by Garuda Indonesia using the Boeing 737-800NG in 2019, focusing on market share, revenue, costs, and overall profit.
Research Methodology: The data analysis method used was Library Research. Second, descriptive data analysis. quantitative, to explain existing data regarding the market analysis of the CGK – UPG PP flight route with use type aircraft B737-800NG data passenger actual Which obtained 186,266 for a period of three months so that the average per month based on the analysis is 93,133. From the results of 849, the calculation of the CGK – UPG Route using the B737-800NG obtained Revenue of US$ 12,262,505 / 3 months, Cost of US$ 11,062,896.71 / 3 months, Profit of US$ 1,210,008.29.
Results: From the results of the calculation of the Route UPG – CGK using B737-800NG, the revenue of US$ 14,694,363, Cost of US$ 13,844,662.34, Profit and US$ 849,700.66, respectively.
Conclusions: Garuda Indonesia holds a 25% frequency share with a 24% passenger share. The route generates total revenue of US$ 26,946,468 and total costs of US$ 21,114,838.46, resulting in a profit of US$ 5,852,429.54, indicating that the route is profitable.
Limitations: The study relies on secondary data and several cost assumptions, such as fuel price and load factor, and is limited to a three-month period in 2019 without accounting for seasonal variations.
Contributions: This study provides a structured model for evaluating airline route profitability, offering practical insights for airline decision-making in revenue and cost management for Boeing 737-800NG operations.

Keywords: *Aircraft, CGK – UPG PP, Garuda B737-800NG, Profitability*

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1. Introduction

Air transportation is one of the supporting business activities for the movement of goods, people, and animals to reach islands and regions in Indonesia, including remote areas (Nugroho et al., 2016; Setyawati & Aristiyanto, 2021; Silva et al., 2021). Time travel journey which more short to be choice main passenger in using air transportation compared to other modes of transportation. PT. Garuda Indonesia is Indonesia's largest airline. Dominating domestic flights with a full-service class (Abdillah, 2021; Ganatra et al., 2021). The Boeing 737-800NG is widely used for short-haul commercial flights. First built in 2001 and officially taking to the skies in 2007, the Boeing 737-800NG was first operated by

the Indonesian airline Garuda Indonesia in 2007 (Sinebar & Abdullah, 2018). The Jakarta-Makassar route has been operating for decades. The market potential of the Jakarta-Makassar route is promising, making it a destination. flights, Garuda Indonesia Airlines has not maximized its market share compared to its competitors (Indrayudi et al., 2020; Prissia & Daryanto, 2019).

Therefore, the Jakarta-Makassar route has a positive impact on PT. Garuda because Makassar has a very strategic location and a very high tourist attraction (Fakhira et al., 2020). The Garuda B737-800NG aircraft was selected by PT. Garuda because it has a fairly large seat capacity of 162Y / 12C, and with more frequencies compared to its competitors such as Lion Air, Batik Air and so on, but in reality, Garuda Indonesia's market share only gets 24% compared to Lion Air whose market share is 28%. Makassar is the capital of the South Sulawesi Province. It is also famous for its charming nature and history (Hasan et al., 2019; Kuncoro & Harahap, 2021). So Makassar City has a lot chosen by tourists for tourist destination. In addition to being a business center for the South Sulawesi region and its surrounding areas, it is also a transit hub for flights from other parts of Eastern Indonesia (Heriyanto, 2021; Keke et al., 2021). This is evident in the 15.94 percent increase in the total number of arriving, departing, and transit domestic passengers, from 468,630 in September 2020 to 543,348 in October 2020, along with growth in industry, business, investment, and the number of flights (Abdullah et al., 2017; Agusinta et al., 2021; Taslim et al., 2018).

From the background and limitations of the research can be formulated as follows: (1) How is the market share on the Jakarta – Makassar PP flight route using the GA B737-800NG aircraft in 2019, (2) How are the costs and revenue for the Jakarta – Makassar PP flight using the GA B737-800NG aircraft in 2019, (3) How is the profitability for Jakarta – Makassar round trip route Using GA Aircraft B737-800NG On In 2019.

The objectives of this study were: (1) To determine the market share for Jakarta – Makassar round-trip flights using the GA B737-800NG aircraft in 2019, (2) To determine the market share for Jakarta – Makassar round-trip flights using the GA B737-800NG aircraft in 2019, Cost And Revenue Flight Jakarta - Makassar PP With Use Aircraft GA B737-800NG In 2019, (3) To Determine Profitability For Jakarta – Makassar PP Route Using GA B737-800NG Aircraft In 2019.

2. Literature Review

Profit is the element that most concerns users because the profit figure is expected to be quite high. To present the performance of a company overall. However, accounting theory has not yet reached the point of understanding and measuring profit. According to (Medias, 2018) profit is the difference that arises when a company's total revenue is greater than its total cost. Profit in a company's operational activities is crucial for ensuring its future survival (Tamulevičienė, 2016). A company's success can be measured by its ability to compete in the market. Every company aims to maximize profits (Diana & Maria, 2020; Hategan et al., 2018). Profit is the primary measure of a company's success. Profitability is the end result of several policies and decisions. done by company. According to (Sutrisno, 2009), "Profitability is the company's ability to generate profits with all the capital working within it.

Profitability is ability to earn profits through all existing capabilities and resources, such as sales activities, cash, capital, number of employees, and number of company branches. Meanwhile, according to (Brigham & Houston, 2009) "Profitability is the end result of a number of policies and decisions made by the company. The ultimate goal of a company wants to achieve is to obtain maximum profit. A profitability ratio is used to measure a company's profit level. According to (Kasmir, 2011),the profitability ratio assesses a company's ability to seek profits". Profitability ratios, according to (Brigham & Houston, 2009), "A group of ratios that show the combined effects of liquidity, asset management, and debt on operating results. These ratios include the profit margin on sales, basic earning power ratio,

return on total assets, and return on common stock equity.

The profitability ratio, according to (Weston & Copeland, 2010), is a measure of management effectiveness based on the return on results from sales and investment. The Profitability Index is the ratio of the present value of future free cash flows to the initial outlay (Dewi et al., 2015). The general formula for the Profitability Index (PI) Mulyadi (2016) is as follows: PI = PV of cash flows subsequent to Initial Investment / Initial Investment. According to Sujarweni (2019), costs in a broad sense are the sacrifice of economic resources measured in monetary units in an effort to obtain something to achieve a certain goal, whether that is already occurred And Not yet happen / just planned. According to Dewi et al. (2015) costs are resources that are sacrificed or released to achieve certain goals in the future. The definition of costs according to Mulyadi (2016) and Parmenas (2021) is "Costs are the sacrifice of economic resources measured in monetary units, which have occurred, are occurring, or are likely to occur for a particular purpose." According to Mulyadi Mulyadi (2016) and Ricardianto et al. (2021), costs can be classified as follows: 1) Classification of Costs According to the Object of Expenditure; In this way, the name of the expenditure object is the basis for cost classification. For example, if the object expenditure is fuel, then all expenses related to fuel are called fuel costs (Ikhsani et al., 2021; Rizqi & Sakinah, 2021).

Classification of Costs According to Main Functions in a Company: In a manufacturing company, there are three main functions: production, marketing, and administrative and general functions (Ordynskaya et al., 2021; Wardhani & Ully, 2021). Therefore, in a manufacturing company, costs can be grouped into three categories: 1) Production Costs are costs incurred to process raw materials into finished products ready for sale. According to the object of expenditure, production costs can be divided into raw material costs, labor costs, and factory overhead costs; 2) Marketing Costs are costs incurred to carry out product marketing activities; and 3) Administrative and General Costs are costs incurred to coordinate product production and marketing activities (Harywibowo & Hariadi, 2022; Klius, 2018; Susanto et al., 2021). Classification of Costs According to the Relationship of Costs to Something Financed. In relation to something financed, costs can be grouped into two categories: 1) Direct Costs, namely costs incurred, the sole cause of which is because of something financed, and 2) Indirect Costs, namely costs that occur not only due to something financed. Indirect costs related to products are called indirect production costs or factory overhead costs. 3) Classification of costs according to their behavior in relationship with changes in activity volume: In this classification, costs can be classified into four types, including variable costs, which are costs whose total amount changes in proportion to changes in activity volume; 1) semi-variable costs, which are costs that change disproportionately to changes in activity volume. Semi-variable costs contain fixed and variable cost elements, 2) Semi-fixed costs remain fixed for a certain level of activity volume (Setyawati et al., 2021; Susanto & Parmenas, 2021). They also changed the amount of constant on production volume certain, 3) Fixed costs, which are costs that remain constant in total within a certain range of activity volume. For example, the production director's salary costs (Lumi & Yosef, 2022; Zadorozhnyi & Ometsinska, 2019).

According to Pamungkas (2019), tariffs for consumers are all forms of monetary costs sacrificed by consumers to obtain, own, and utilize a number of combinations of goods and services of a product. According to Duari (2018) and Prijono et al. (2021), fare is the amount of costs charged by the carrier for passengers and their luggage, which is published generally to the public based on the type of class listed to obtain services according to the class and route taken. Tariff determination factors according to Amin (2013), Parmenas (2022), and Saputra and Kusnadi (2021), the factors that influence the determination of the tariff are as follows: Costs are the lower limit, competitor tariffs, and substitute goods tariffs are the orientation points that companies need to consider, and customer assessment of the unique product appearance of the company's offerings is the upper limit of the price tariff (Nuraeni et al., 2022; Sumaryadi & Kusnadi, 2021; Suyanto et al., 2021).

According to Assauri (2015) and Hernawan et al. (2022), flight frequency is the number of flights per month. from the origin and destination of the airline. Factors Affecting Frequency Flight, According to Abidin et al. (2022), Nunuh and Wulandari (2021), and Setiyaningrum et al. (2015) factor – factor This is factor which plays an important role in determining flight frequency. According to Achir et al. (2022), Siregar (2013), and Wijayanti and Santoso (2022) the air transportation system includes vehicles, namely airplanes, flight paths (ways), flight networks, air traffic control, telecommunications and navigation, runway lights, and aviation meteorology. The air transportation system also includes things on land, namely taxiways, passenger and cargo terminal aprons, electricity and water, fire extinguishers, ground handling equipment, hangars, aviation health, offices, highway networks, flag fences, and other supporting facilities (Fadlianto & Sulistyowati, 2022; Lesmini et al., 2022; Saputra & Kusnadi, 2021).

An airport is a portion of land within an airport area used for take-off and landing as a ground movement area for aircraft (Kurniawan & Hariadi, 2022; Narcizo et al., 2020). Except for landing and take-off facilities (which consist of runways, taxiways, runway lighting, etc.) for service on radar, ILS (instrument next system), NDB (non-directional beacon), DVOR (distance very high frequency omni range), DME (distance measuring equipment), meteorological services, aircraft parking facilities (apron), hangar, aircraft maintenance facilities, fuel filling facilities burn, and facility service culinary (catering) (Abdullah & T., 2017; Aprillita & Perkasa, 2021). Aircraft air, which is new, continues to enter the world flight with greater capacity. This implies not only a greater number of passengers to serve but also higher requirements for flight facilities (Satria, 2021; Solihin, 2021). The runway length and carrying capacity must be increased, navigation equipment must be upgraded with more sophisticated technology, waiting areas and baggage handling equipment must be added, parking needs to be expanded, and other facilities need to be opened (Anggraini, 2021; Ardhianti et al., 2022; Fadhilah et al., 2022).

Airport capacity can be calculated based on the number of takeoffs and landings during peak hours. A reasonable limit on crowding during peak hours is 50–60 aircraft taking off and landing in clear air or 30–40 aircraft taking off and landing with the help of equipment in bad weather. If the air had two parallel runways, this number could almost double (Fathihani, 2021; Fathihani & Nasution, 2021; Ricardianto et al., 2021).

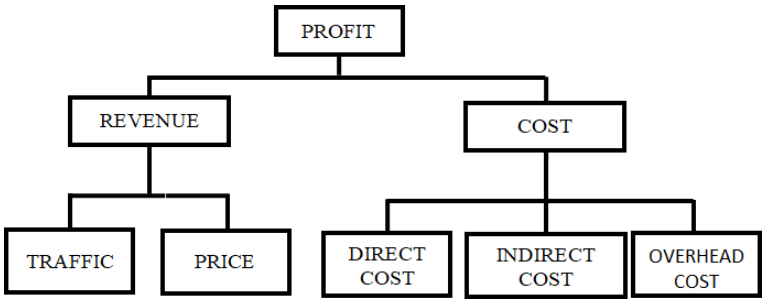

Figure 1. Research Framework

Figure 1 illustrates that profit is the main objective, influenced by revenue and cost. Revenue is generated through traffic (the number of customers) and price (the amount charged). Costs are divided into direct costs (expenses directly related to production), indirect costs (necessary for overall operations), and overhead costs (general expenses that support the organization). The framework highlights that profit is maximized by increasing revenue through higher traffic and optimal pricing, while controlling various types of costs.

3. Methodology

This study was conducted to determine the profitability of the Jakarta-Makassar route using a Garuda B737-800NG aircraft. Therefore, this study will use a quantitative research approach through data collection from the internet due to the impact of the COVID-19 pandemic, which limited the author's ability to find data. The data sources used in this study were primary and secondary data. The author used a quantitative research data analysis technique (Sugiyono, 2016).

4. Results and Discussion

As for data statistics airlines Which do journey with route Jakarta – Makassar as following:

Table 1. Frequency Garuda route CGK-UPG Year 2019

AIRLINE	TYPE AIRCRAFT	DAYS OPERATION	SCHEDULE
GA 616	B737-800	1,2,3,4,5,6,7	CGK-UPG
GA 608	B737-800	1,2,3,4,5,6	CGK-UPG
GA 604	B737-800	1,2,3,4,5,6,7	CGK-UPG
GA 642	B737-800	1,2,3,4,5,6,7	CGK-UPG
GA 650	B737-800	1,3,5,6	CGK-UPG
GA 612	B737-800	1,2,3,4,6	CGK-UPG
GA 640	B737-800	1,2,4,6	CGK-UPG
GA 654	B737-800	1,3,4,6	CGK-UPG

Source: https://www.wego.co.id

Table 2. Frequency Garuda route UPG-CGK Year 2019

AIRLINES	TYPE AIRCRAFT	DAYS OPERATION	SCHEDULE
GA 616	B737-800	1,2,3,4,5,6,7	UPG-CGK
GA 608	B737-800	1,2,3,4,5,6	UPG-CGK
GA 604	B737-800	1,2,3,4,5,6,7	UPG-CGK
GA 642	B737-800	1,2,3,4,5,6,7	UPG-CGK
GA 650	B737-800	1,3,5,7	UPG-CGK
GA 612	B737-800	1,2,3,4,6	UPG-CGK
GA 640	B737-800	1,2,4,6	UPG-CGK
GA 654	B737-800	1,3,4,7	UPG-CGK

Source: https://www.wego.co.id

Based on Table 1 and Table 2, frequency of airlines operating in 2019 the CGK-UPG PP route Garuda Indonesia airlines using the B737-800NG aircraft type with an average frequency of 6 times a day on certain days up to 7 times (in a week there are 2 days operating 7 times) namely Monday and Saturday, so the total frequency is 44 times a week. PT. Garuda Indonesia operates 44 flights on the CGK - UPG route per week, namely on Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday using the B737-800NG aircraft type, so that the total frequency for three months is 44 times. is 578 times plus an extra 3 months of 29 times; thus, the total frequency is 607 times.

Table 3. Frequency Lion Water route CGK-UPG Year 2019

AIRLINES	AIRCRAFT TYPE	DAYS OPERATION	SCHEDULE
JT 872	B737-800	1,2,3,4,5,6,7	CGK-UPG
JT 874	B737-800	1,2,3,4,5,6,7	CGK-UPG
JT 772	B737-800	1,2,3,4,5,6,7	CGK-UPG
JT 994	B737-800	1,2,3,4,5,6,7	CGK-UPG
JT 778	B737-800	1,2,3,4,5,6,7	CGK-UPG
JT 892	B737-800	1,2,3,4,5,6,7	CGK-UPG

Source: https://www.wego.co.id

Table 4. Frequency Lion Water route UPG-CGK Year 2019

AIRLINES	AIRCRAFT TYPE	DAYS OPERATION	SCHEDULE
JT 872	B737-800	1,2,3,4,5,6,7	UPG-CGK
JT 874	B737-800	1,2,3,4,5,6,7	UPG-CGK
JT 772	B737-800	1,2,3,4,5,6,7	UPG-CGK
JT 994	B737-800	1,2,3,4,5,6,7	UPG-CGK
JT 778	B737-800	1,2,3,4,5,6,7	UPG-CGK
JT 892	B737-800	1,2,3,4,5,6,7	UPG-CGK

Source: https://www.wego.co.id

Based on Table 3 and Table 4, frequency of Lion Air airlines operating in 2019 the CGK-UPG PP route Lion Air's development is in line with the pace of economic development, for the CGK-UPG route. Lion Air flies the CGK-UPG route 42 times a week, namely on Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday, using the B737-800NG aircraft. Therefore, the total frequency for three months was 42/7 × 92 days = 552 times. In this discussion, the B737-800NG aircraft type is used with the assumption of flying with the same frequency, namely, as much as 42 times in a week or 552 flights /3 months. Likewise, the Lion Air flight route UPG-CGK is the same.

Table 5. Frequency Batik Water route CGK-UPG Year 2019

AIRLINES	AIRCRAFT TYPE	DAYS OPERATION	SCHEDULE
ID 6198	B737-800	1,2,3,4,5,6,7	CGK-UPG
ID 6182	B737-800	1,2,3,4,5,6,7	CGK-UPG
ID 6236	B737-800	1,2,3,4,5,6,7	CGK-UPG
ID 6296	B737-800	1,2,3,4,5,6,7	CGK-UPG
ID 6266	B737-800	1,2,3,4,5,6,7	CGK-UPG

Source: https://www.wego.co.id

Table 6. Frequency Batik Water Route UPG-CGK Year 2019

AIRLINES	AIRCRAFT TYPE	DAYS OPERATION	SCHEDULE
ID 6198	B737-800	1,2,3,4,5,6,7	UPG-CGK
ID 6182	B737-800	1,2,3,4,5,6,7	UPG-CGK
ID 6236	B737-800	1,2,3,4,5,6,7	UPG-CGK
ID 6296	B737-800	1,2,3,4,5,6,7	UPG-CGK
ID 6266	B737-800	1,2,3,4,5,6,7	UPG-CGK

Source: https://www.wego.co.id

Based on Table 5 and Table 6, flight frequency can be determined from the number of daily departures and arrivals of an aircraft at an airport. The development of Batik Air is in line with the pace of economic development for the CGK-UPG route. Batik Air flies the CGK-UPG route 35 times a week, namely on Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday using the B737-800NG aircraft type, so that the total frequency for three months $35/7 \times 92$ days is 460 times. In the discussion using the B737-800NG aircraft type with the assumption of flying with amount the frequency that the same, namely as much 35 times in a week or 460 flights /3 months. Likewise, for Batik Air flights on the UPG-CGK route.

Table 7. Frequency Citilink route CGK-UPG Year 2019

AIRLINES	AIRCRAFT TYPE	DAYS OPERATION	SCHEDULE
QG 340	B737-800	1,2,3,4,5,6,7	CGK-UPG
QG 332	B737-800	1,2,3,4,5,6,7	CGK-UPG
QG 426	B737-800	1,2,3,4,5,6,7	CGK-UPG
QG 212	B737-800	1,2,3,4,5,6,7	CGK-UPG
QG 250	B737-800	1,2,3,4,5,6,7	CGK-UPG

Source: https://www.wego.co.id

Table 8. Frequency Citilink route UPG-CGK Year 2019

AIRLINES	AIRCRAFT TYPE	DAYS OPERATION	SCHEDULE
QG 340	B737-800	1,2,3,4,5,6,7	UPG-CGK
QG 332	B737-800	1,2,3,4,5,6,7	UPG-CGK
QG 426	B737-800	1,2,3,4,5,6,7	UPG-CGK
QG 212	B737-800	1,2,3,4,5,6,7	UPG-CGK
QG 250	B737-800	1,2,3,4,5,6,7	UPG-CGK

Source: https://www.wego.co.id

Based on Table 7 and Table 8, flight frequency can be determined from the number of aircraft departures and arrivals from an airport every day. Citilink's development is in line with the speed of economic development for the CGK-UPG route. Citilink operates 35 flights per week on the CGK-UPG route, namely on Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday, using the following aircraft type: The B737-800NG, so the total frequency for three months $(35/7 \times 92$ days) is 460 times. In this discussion, the author uses the B737-800NG aircraft type, assuming the same frequency of flights, namely 35 times a week or 460 flights per three months. Similarly, the Citilink flight on the UPG-CGK route is the same.

Table 9. Frequency Sriwijaya Water Route CGK-UPG Year 2019

AIRLINES	AIRCRAFT TYPE	DAYS OPERATION	SCHEDULE
SJ 588	B737-800	1,2,3,4,5,6,7	CGK-UPG
SJ 584	B737-800	1,2,3,4,5,6,7	CGK-UPG

Source: https://www.wego.co.id

Table 10. Frequency Sriwijaya Water Route UPG-CGK Year 2019

AIRLINES	AIRCRAFT TYPE	DAYS OPERATION	SCHEDULE
SJ 588	B737-800	1,2,3,4,5,6,7	UPG-CGK
SJ 584	B737-800	1,2,3,4,5,6,7	UPG-CGK

Source: https://www.wego.co.id

Based on Table 9 and Table 10, flight frequency can be determined from the number of daily departures and arrivals of an aircraft at an airport. The development of Sriwijaya Air is in line with the pace of economic development for the CGK-UPG route. Sriwijaya Air operates 14 flights on the CGK-UPG route weekly, namely on Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday, using a B737-800NG aircraft. Therefore, the total frequency for three months $14/7 \times 92$ days was 184 times. In this discussion, the author uses the B737-800NG aircraft type with the assumption of flying with the same number of frequencies, namely 14 times a week or 184 flights / 3 months. Likewise, Sriwijaya Air flights on the UPG-CGK route are the same. Based on the frequency data, By using each airline's flight schedule, the author can create a frequency share. The table below shows the flight frequencies for each airline over three months.

Table 11. Frequency Flight Airline during 3 month Route UPG-CGK Year 2019

Airline	Frequency flight 3 month
Garuda	607
sea lion	552
Batik Water	460
Citilink	460
Sriwijaya Air	184

Source: Data Processed by writer

By knowing the flight frequency of each airline, the author can determine the share frequency of each airline.

$$\text{Garuda} = \frac{F \text{ Garuda}}{\text{total } F} \times 100\% = \frac{578}{2234} \times 100\% = 25\%$$

$$\text{Lion Air} = \frac{F \text{ Lion Water}}{\text{total } F} \times 100\% = \frac{552}{2234} \times 100\% = 24\%$$

$$\text{Batik Water} = \frac{F \text{ Batik Water}}{\text{total } F} \times 100\% = \frac{460}{2234} \times 100\% = 20\%$$

$$\text{Citilink} = \frac{F \text{ Citilink}}{\text{total } F} \times 100\% = \frac{460}{2234} \times 100\% = 20\%$$

$$\text{Sriwijaya Water} = \frac{F \text{ Sriwijaya Water}}{\text{total } F} \times 100\% = \frac{184}{2234} \times 100\% = 8\%$$

Figure 2. Frequency Share Diagram

Based on Figure 2, the flight frequency data for each airline were determined as follows: Garuda = 25%, Lion Air = 24%, Batik Air = 20%, Citilink = 20%, and Sriwijaya = 11%. This study focused only on Garuda. Passenger statistics for the Jakarta-Makassar route are as follows:

Table 12. Total Passenger Airline route Jakarta – Makassar PP during 3 Month Year 2019

Aircraft Type	October	November	December
Garuda Indonesia	64439	65881	55946
sea lion	91107	68407	62068
Batik Water	65363	50387	37994
Citilink	32502	40762	38991
Sriwijaya	26652	29860	27737
Other	3460	3322	2935

Source: PT. Garuda Indonesia

Based on Table 2, total amount passenger during 3 month For airline Garuda = 186,266 Pax, Lion Air = 221,582 Pax, Batik Air = 153,744 Pax, Citilink = 112,255 Pax, Sriwijaya = 84,249 Pax, and Other = 9,717 Pax.

With thus writer can know passenger share every airline:

$$\text{Garuda} = \frac{F\ \text{Garuda}}{\text{total}\ F} \times 100\% = \frac{186{,}266}{767{,}813} \times 100\% = 24\%$$

$$\text{Lion Air} = \frac{F\ \text{Lion Air}}{\text{total}\ F} \times 100\% = \frac{221{,}582}{767{,}813} \times 100\% = 28\%$$

$$\text{Batik Air} = \frac{F\ \text{Batik Air}}{\text{total}\ F} \times 100\% = \frac{153{,}744}{767{,}813} \times 100\% = 20\%$$

$$\text{Citilink} = \frac{F\ \text{Citilink}}{\text{total}\ F} \times 100\% = \frac{112{,}255}{767{,}813} \times 100\% = 14\%$$

$$\text{Sriwijaya} = \frac{F\ \text{Sriwijaya}}{\text{total}\ F} \times 100\% = \frac{84{,}249}{767{,}813} \times 100\% = 13\%$$

$$\text{Other} = \frac{F\ \text{Other}}{\text{total}\ F} \times 100\% = \frac{9{,}717}{767{,}813} \times 100\% = 1\%$$

This is a pie chart showing the passenger share of all airlines.

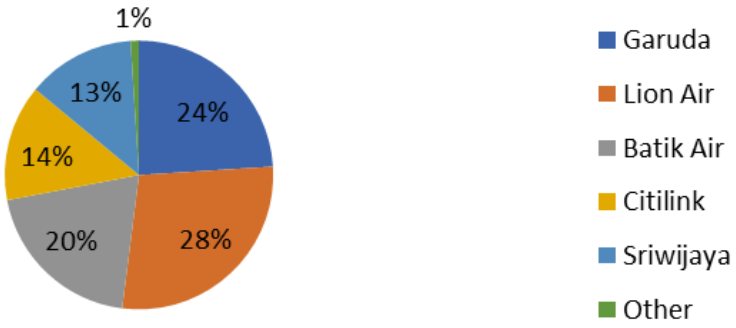

Figure 3. Passanger Share Diagram

based on Figure 3, the author obtained the total Passenger Share for three months for Garuda Indonesia Airlines = 24%, Lion Air = 28%, Batik Air = 20%, Citilink = 14%, Sriwijaya = 13%, and others = 1%.

Flight hours were calculated based on the block time. Block time is the time required for a one-stop flight from one location to another, calculated from the time the engine is turned on (block on) upon departure until the engine is turned off (block off) at arrival. Below is the block time for Garuda Indonesia flight routes, which will be used as the basis for calculating time. operating costs for CGK – UPG PP flights.

Table 13. Data Route Flight CGK-UPG or 2019 Garuda Indonesia

From	To	Distance NM	Distance KM	Type Aircraft	Block Time
CGK	UPG	828	1,533	B737-800	02.30
UPG	CGK	802	1,485	B737-800	02.45

Source: Data processed by writer

Table 13 shows the CGK-UPG flight route in 2019 using the B737-800 aircraft type with a distance of 828 NM from CGK to UPG, while the distance between UPG and CGK is 802 NM. B737-800NG, Aircraft characteristic data are data issued by the manufacturer and used as basic calculation material for each aircraft for operators (airlines/air character).

Based on Table 14, it can be explained as follows: The B 737-800NG aircraft uses a twinjet turbofan engine using the CFM56-7B26 engine type, this engine has been developed For Next Generation 737 operator with Power push Which more tall, improvement efficiency, and lower maintenance costs than its predecessor, the CFM56-3. The crew of this aircraft consists of one set of Cockpit Crew, namely one captain and one co-pilot, and one set of Cabin Crew, namely six Flight Attendants. There are two classes: 12 seats for business and 162 seats for economy. The overall length of the B 737-800NG aircraft is 39.47 m, with a height of 12.5 m and a wingspan of 35.78 m. The carrying capacity with a Dry Operating Weight (DOW) of 44,624 kg, Maximum Zero Fuel Weight (MZFW) of 61,688 kg, maximum take-off weight (MTOW) of 79,015 kg, Maximum Landing Weight (MLW) of 65,317 kg, and Maximum The payload of 17,065 kg. Meanwhile, the performance of this aircraft has a flight distance of 3,059 NM with a Cruising Speed of M 0.79 reaching a maximum level of M 0.82, with a Takeoff Distance at MTOW of 2,522 m at a temperature of 30 °C and a Minimum Landing Distance of 1,538 m.

Load Factor, Success indicators something company flight usually use parameter Load factor. This load factor is divided into two types: weight and seat load factors. The weight load factor is the ratio of the total weight transported (weight sold) multiplied by the distance to the total available weight capacity (payload

Table 14. Specification of Aircraft B 737-800NG PT. Garuda Indonesia

A/C Type	B 737-800NG
Engine Type	CFM 56-7B26
Seat Configuration	
Passenger	12C/162Y
Crew	2 Pilots & 6 Flight Attendants
Dimensions	
Overall Length	39.47 m
Height	12.5 m
Wing Span	35.78 m
Aircraft Structure	
DOW	44.624 kg
MZFW	61.688 kg
MTOW	79.015 kg
MLW	65.317 kg
Maximum Payload	17.064 kg
Performance	
Range	3,059 NM
Speed	
Cruising Speed	M 0.79
Maximum Speed	M 0.82
Takeoff Field (Sea Level, ISA)	
Takeoff Distance at MTOW	2.522 m
Minimum Landing Distance	1.538 m

Source: PT Garuda Indonesia

multiplied by the distance). Meanwhile, the pax load factor (PLF) is the ratio comparison between the number of seats sold (seat sold) times the distance with the number of seats available (saleable seats) multiplied by the distance and usually in the form of a percentage. Variables that influence the number of passengers include those driven by competitive price offers, good service, intensive promotions, many schedule options, frequencies that suit the needs of prospective passengers, and the aircraft type. Frequency Analysis Using B737-800NG Aircraft on CGK Route – UPG PP Year 2019, On analysis frequency with use type aircraft B737-800NG route CGK-UPG PP, total frequency in 3 months using the B737-800NG aircraft type is 607 flights, In processing the load data per flight, the assumption of pax load factor used for the B737-800 NG aircraft type is 87.9%. The following is Table 4.15 load data for the B737-800NG aircraft type.

Table 15. Analysis Data Load B737-800NG Route CGK–UPG and UPG–CGK (Per Flight)

ITEM	B737-800NG
Maximum Payload	17,064 Kg
Capacity seat	174 Seat = 12C/162Y
SBW	85 kg
Capacity seat × SBW	14,790 Kg
Pax per 3 months	93,133 Pax
Frequency per 3 month	607 Flight
Pax per Flight	153 Pax
Cargo per 3 month	607,000 Kg
Assumption Cargo per Flight	1,000 Kg
Excess Baggage per 3 month	12,140 Kg
Excess Baggage per Flight	20 Kg
PLF per Flight	87.9%
WLF per Flight	79%

Source: Data processed by writer

Based on Table 15, B737-800NG CGK–UPG–CGK and UPG–CGK routes with a frequency of 3 months can be explained as follows: 1) Pax per flight: With a frequency of 607 flights, the average number of passengers carried by the B737-800NG is 153 pax per flight; 2) PLF per flight: The amount of pax load factor (PLF) per flight transported by the B737-800NG is 87.9%; and 3) Cargo per Flight, Based on the data, cargo/flight is 1000 kg/flight. Cargo in 3 months divided by the frequency (607) of the total 607,000 kg, 4) Excess Baggage per flight, In the excess baggage data per flight the same is 20 kg. In 3 months, the excess baggage was 12,140 kg, because it was assumed that per flight it was 20 kg, 5) WLF per flight So WLF per flight using the B737-800NG aircraft type reaches 79

Cost for CGK – UPG PP B737-800NG Flights in 2019 In the discussion of Cost and Revenue for the CGK – UPG round trip route in 2019 using Garuda aircraft For the B737-800NG, the author limits it to revenue derived from passengers, excess baggage, and cargo. In the cost analysis, the author uses a breakdown based on the division of direct and indirect operating costs of the ship. These direct operating costs consist of two types: fixed direct operating costs and variable direct operating costs. These costs affect the operation of the CGK-UPG round-trip route on Garuda Indonesia Airlines. The cost assumptions used by the author in this analysis correspond to the costs of the aircraft type used on the UPG-CGK route on Garuda Indonesia Airlines. Indonesia Airlines. The aircraft used was a B737-800NG. Assuming that the author's data have not changed, the cost allocation for the aircraft is as follows: Allocation of B737-800NG Aircraft Operating Costs for the CGK-UPG Route Because fuel prices fluctuate according to the dollar exchange rate, this study assumes that the price of Avtur fuel is fixed, namely at a price in 2019 of Rp. 9,550 or US$ 0.68 per liter with an exchange rate of 1 US$ = Rp. 14,000,

The following is Table 16 Cost Allocation for B737-800NG Aircraft on the CGK – UPG PP Route Per Flight at PT. Garuda Indonesia. Based on Table 16, 15 Revenues for the B737-800NG aircraft on the CGK-UPG route per 3 months with an estimated B737-800NG load factor of 87.9, Revenue for the CGK – UPG PP B737-800NG Flight in 2019 2019

Table 16. Allocation Cost Aircraft B737-800NG Route CGK–UPG PP per Flight at PT. Garuda Indonesia

Cost Component	CGK–UPG / Flight	UPG–CGK / Flight
Direct Traffic Costs		
Passenger Commission	975.00	1,177.80
Freight Commission	195.00	235.56
Credit Card Commission	585.00	706.68
Catering	780.00	780.00
On Board Service	60.56	64.68
Reservation	1,187.32	1,207.49
Total Direct Traffic Costs	**3,782.88**	**4,172.21**
Direct Flight Costs		
Fuel Aircraft (7000 lt $\times$ 0.68)	4,760.00	4,760.00
Landing	47.33	47.33
Handling	651.91	651.91
Water Traffic Control	230.20	236.54
Cockpit Crew Travel	425.21	447.24
Cabin Crew Travel	471.54	485.99
Variable Maintenance	1,388.89	1,507.32
Total Direct Flight Costs	**7,975.08**	**8,136.33**
Total Direct Costs	**11,757.96**	**12,308.54**
Indirect Costs		
Cockpit Crew Person	350.30	372.85
Cabin Crew Person	134.45	138.39
Water Craft Maintenance	38.68	41.93
Total Indirect Costs	**523.43**	**537.44**
Total Direct and Indirect Costs	**12,281.39**	**12,845.98**
Fleet Costs		
Depreciation Aircraft	357.67	383.27
Lease Aircraft	3,116.69	3,357.58
Insurance	35.98	37.60
Total Fleet Costs	**3,510.34**	**3,669.88**
Total Direct, Indirect, Fleet Costs	**15,791.73**	**16,515.86**
Overhead Costs		
Overhead Cost	283.71	214.98
Station	363.14	383.31
Sales Organization	229.27	235.98
Marketing	49.74	48.55
Administration	144.08	339.94
Flight Interrupted	10.31	48.88
Total Overhead	**1,080.25**	**1,271.64**
Total Cost	**16,871.98**	**17,787.50**

Source: PT. Garuda Indonesia, processed by writer

Table 17. Revenue Aircraft B737-800NG Route CGK–UPG per 3 Months at PT. Garuda Indonesia

Item	Quantity (3 Months)	Tariff (US$)	Revenue (US$)
Passenger (Pax)	93,133	125	11,641,625
Cargo (Kg)	607,000	1	607,000
Excess Baggage (Kg)	12,140	2	24,280
Total Revenue			**12,272,905**

Source: Data processed by the author

From Table 17, it can be seen that the total passenger income for three months for the CGK – UPG route using the B737 – 800NG aircraft type is US$ 11,641,625, so that the overall total including cargo and exc. Baggage for 3 months is US$ 12,272,905. The determination of the tariff in the revenue table above, the author sets the tariff based on the average tariff for economy class service on the CGK – UPG route of Rp. 1,750,000 or US$ 125. The author assumes a cargo tariff of US$ 1 and an exc. baggage tariff of US$ 2. Meanwhile, Table 16 shows the revenue of the B737-800 aircraft on the UPG-CGK route per three months with an estimated load factor of B737-800NG of 87.9%.

Table 18. Revenue Aircraft B737-800NG Route UPG–CGK per 3 Months at PT. Garuda Indonesia

Item	Quantity (3 Months)	Tariff (US$)	Revenue (US$)
Passenger (Pax)	93,133	151	14,063,083
Cargo (Kg)	607,000	1	607,000
Excess Baggage (Kg)	12,140	2	24,280
Total Revenue			**14,694,363**

Source: Data processed by the author

Based on Table 18, the total passenger income for 3 months for the UPG-CGK route using the B737-800NG aircraft type is US$ 14,063,083, while the total including cargo and exc. Baggage for 3 months is US$ 14,694,363. The author determines the tariff in the revenue table above based on the average tariffs. average economy class service on the UPG route – CGK as high as Rp 2,114,000 or US$ 151, more expensive US$26 compared to tariff CGK – UPG which amounts to US$125. The author assumes a cargo tariff of US$1 and exc baggage of US$2.

Table 19 shows the calculation of Cost B737-800NG aircraft Route CGK-UPG PP Every three Months at PT. Garuda Indonesia.

Table 19. Allocation Cost Aircraft B737-800 Route CGK–UPG PP per 3 Months at PT. Garuda Indonesia

Cost Component	CGK–UPG / 3 Months	UPG–CGK / 3 Months
Direct Traffic Costs		
Passenger Commission	591,825.00	714,824.60
Freight Commission	118,365.00	142,984.92
Credit Card Commission	355,095.00	428,954.76
Catering	473,460.00	473,460.00
On Board Service	36,759.92	39,260.76
Reservation	720,703.24	732,946.43
Total Direct Traffic Costs	**2,296,208.16**	**2,532,431.47**
Direct Flight Costs		
Fuel Aircraft	2,889,320.00	2,889,320.00
Landing	28,729.31	28,729.31
Handling	395,709.37	395,709.37
Water Traffic Control	139,731.40	143,579.78
Cockpit Crew Travel	258,102.47	271,474.68
Cabin Crew Travel	286,224.78	294,995.93
Variable Maintenance	843,056.23	914,943.24
Total Direct Flight Costs	**4,840,973.56**	**4,938,752.31**
Total Direct Costs	**7,137,081.72**	**7,471,183.78**
Indirect Costs		
Cockpit Crew Person	212,632.10	226,319.95
Cabin Crew Person	81,611.15	84,002.73
Water Craft Maintenance	23,478.76	25,451.51
Total Indirect Costs	**317,722.01**	**335,774.19**
Total Direct and Indirect Costs	**7,454,803.73**	**7,806,957.97**
Fleet Costs		
Depreciation Aircraft	217,105.69	232,644.89
Lease Aircraft	1,891,830.83	2,038,051.06
Insurance	21,839.86	22,823.20
Total Fleet Costs	**2,130,776.38**	**2,293,519.15**
Total Direct, Indirect, Fleet Costs	**9,585,580.11**	**10,100,447.12**
Overhead Costs		
Overhead Cost	172,211.97	130,492.86
Station	220,425.98	232,669.17
Sales Organization	139,166.89	143,239.86
Marketing	30,192.18	29,469.85
Administration	87,456.56	206,343.58
Flight Interrupted	6,258.17	29,670.16
Total Overhead	**656,925.75**	**771,885.48**
Total Cost	**10,242,505.86**	**10,872,332.60**

Source: PT. Garuda Indonesia, processed by writer

The following is Table 4.20 Profitability of the B737-800NG aircraft on the CGK – UPG and UPG – CGK routes in 2019.

Table 20. Profitability B737-800NG Route CGK–UPG PP Year 2019

Item	CGK–UPG	UPG–CGK
Total Revenue	US$ 12,262,505	US$ 14,683,963
Total Cost	US$ 10,242,505	US$ 10,872,332.60
Total Profit	US$ 2,030,399.14	US$ 3,822,030.40

Source: Data processed by writer

Passenger Commission, assume 5% of the average tariff for the CGK - UPG route so that the passenger commission issued for 3 months is US$ 591,825. Freight Commission, assume per 3 months Freight Commission for the CGK – UPG route is US$ 195, thus the Freight Commission issued will be paid for 3 months, namely US$ 195 times flight frequency per 3 months = US$ 195 × 607 = US$ 118,365 per 3 months. Credit Card Commission, assume per 3 months Credit Card Commission for the CGK – UPG route is US$ 585, thus the Credit Card Commission paid for 3 months is US$ 585 multiplied by the flight frequency per 3 months = US$ 585 × 607 = US$ 355,095 per 3 months. Catering, Catering generated per flight is US$ 780, thus the catering costs incurred for 3 months are US$ 473,460. The result is obtained from the catering costs per flight multiplied by the frequency of 3 months. On Board Service, thus On Board Service which issued during 3 months is as big as US$ 36,759.92. The result was obtained by multiplying the onboard service cost per flight by the frequency for three months. Reservation cost incurred for three months is US$ 720,703.24. The result was obtained by multiplying the reservation cost per flight by the frequency for three months. Fuel Aircraft: The fuel aircraft spent for 3 months is US$ 4,760 multiplied by the flight frequency per 3 months = US$ 4,760 × 607 = US$ 2,889,320 per 3 months.

Landing: the cost of landing. The landing fee per flight is US$ 47.33. This figure was obtained from the MTOW B737-800NG 79 tons. Every 40–100 tons is subject to a tariff of IDR 312,035. Therefore, the landing fee = 312,035 + 8,900/ton × (79–40) = 312,035 + 350,610 = IDR 662,645 or US$ 47.33. Therefore, the landing cost for 3 months is US$ 47.33 multiplied by the flight frequency per 3 months = US$ 47.33 × 607 = US$ 28,729.31 per 3 months. Handling, for handling costs assumed per flight US$ 651.91 so the handling cost for 3 months is US$ 651.91 multiplied by the flight frequency per 3 months = US$ 651.91 × 607 = US$ 395,709.37 per 3 months. Air Traffic Control, assume per flight Air Traffic Control is US$ 230.20 thus the Air Traffic Control costs generated for 3 months are US$ 230.20 multiplied by the flight frequency per 3 months = US$ 230.20 × 607 = US$ 139,792.10 per 3 months.

Cockpit Crew Travel, assume the cost of cockpit crew per flight is US$ 425.21 so the cost of cockpit crew for 3 months is US$ 425.21 multiplied by the flight frequency per 3 months = US$ 425.21 × 607 = US$ 258,102.47 per 3 months. Cabin Crew Travel, assuming per flight is US$ 471.54 so the cost of cabin crew for 3 months is US$ 471.54 multiplied by the flight frequency per 3 months = US$ 471.54 × 607 = US$ 286,224.78 per 3 months. Maintenance variable, Maintenance variable is the cost of aircraft maintenance and repair. The cost of using the B737-800 aircraft type per flight is US$ 1,388.89, so the total variable cost for 3 months is US$ 1,388.89 times the flight frequency per three months = US$ 1,388.89 × 607 = US$ 843,056.23 per three months.

Cockpit Crew Person, Cockpit Crew Person is wages which are accepted by a cockpit crew per flight US$ 350.30 so the total cost of cockpit crew person for 3 months is US$ 350.30 multiplied by flight frequency per 3 months = US$ 350.30 × 607 = US$ 212,632.10 per 3 months. Cabin Crew Person, Cabin Crew Person is the salary received by a cabin crew per flight US$ 134.45 so the total cost of cabin crew person for 3 months is US$ 134.45 multiplied by flight frequency per 3 months = US$ 134.45 × 607 = US$ 81,611.15 per 3 months. Aircraft Maintenance, Aircraft Maintenance is the cost of aircraft maintenance per flight US$ 38.68 so the total cost of aircraft maintenance for 3 months is US$ 38.68

multiplied by flight frequency per 3 months = US$ 38.68 $\times$ 607 = US$ 23,478.76 per 3 months.

Profitability for the Jakarta – Makassar PP B737-800 route in 2019, from all the data written by the author, the author was finally able to make the profitability of the Jakarta – Makassar PP route using the Garuda B737-800NG aircraft in 2019 for three months as follows:

1. The Total Cost for the CGK – UPG Route is US$ 10,242,505.86, and the total cost for the UPG – CGK route is US$ 10,872,332.60. Therefore, the total cost for the CGK – UPG round-trip route for three months using the B737-800NG is US$ 21,114,838.46.
2. It is known that the total revenue for the CGK – UPG route is US$ 12,262,505, and the total revenue for the UPG – CGK route is US$ 14,683,963. So the total revenue for the CGK – UPG round-trip route for 3 months using the B737-800NG is US$ 26,946,468.
3. Therefore, the total profit for route CGK – UPG PP for three months using B737-800NG is total revenue CGK – UPG PP minus total cost CGK – UPG PP:

   $$\begin{aligned}\text{Profit} &= \text{Total Revenue} - \text{Total Cost} \\ &= \text{US\$ } 26,967,268 - \text{US\$ } 21,114,838.46 \\ &= \text{US\$ } 5,852,429.54\end{aligned}$$

5. Conclusions

The CGK - UPG PP flight route uses the B737-800NG aircraft type. The market share of the CGK-UPG PP flight route is controlled by Garuda. The frequency is 25%, while the market share is controlled by Lion Air at 28%. Garuda has a frequency share of 25%, which is higher than Lion Air's 24%; however, its market share is less competitive than Lion Air's, namely GA 24% and JT 28%. Based on Cost Table 4.20 above, the author can conclude that the total cost for the CGK – UPG PP Route for three months using B737-800NG is US$ 21,114,838.46. Based on Revenue Tables 4.18 and 4.19 above, the author can conclude that the total revenue for CGK – UPG PP route for 3 months using B737-800NG is US$ 26,967,268. Based on Cost Table 4.20 above, the author can conclude that the total profit for the CGK – UPG PP route for 3 months using B737-800NG is US$ 5,852,429.54.

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Author Contributions

MAH conceptualized the research, conducted the data analysis, and wrote the manuscript. MYP provided assistance with the literature review, data collection, and methodology development. TW contributed to the theoretical framework and revised the manuscript. All authors approved the final manuscript for submission.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this study. This research was conducted independently, and no financial or personal relationships influenced the results or interpretation of the findings.

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References

Abdillah, A. M. (2021). Various policies of pt garuda indonesia (persero) tbk. in increasing its productivity, efficiency and income. *Journal of Social Research*, *1*(1), 54–64. https://doi.org/10.55324/josr.v1i1.4

Abdullah, A., Dirawan, G. D., & Pertiwi, N. (2017). Sustainability of ecology and economic of urban farming development: Case study in makassar city, south sulawesi province. *Ecology, Environment and Conservation*, *23*(1), 125–130.

Abdullah, T., & T., F. (2017). *Manajemen pemasaran*. PT Raja Grafindo Persada.

Abidin, A. A., Muratin, M., & Rahadian, M. I. (2022). Analyzing the effect of product quality on consumer satisfaction at shoe and sandal stores in bogor regency. *Journal of Economics, Management, Entrepreneurship, and Business*, *2*(1), 52–64. https://doi.org/10.52909/jemeb.v2i1.78

Achir, M. M., Suryawan, R. F., Maulina, E., & Tannady, H. (2022). Handling of incoming cargo to support smooth goods delivery: A review of four aspects. *Jurnal Transportasi, Logistik, Dan Aviasi*, *1*(2), 96–105. https://doi.org/10.52909/jtla.v1i2.62

Agusinta, L., Nugroho, A. E., Fachrial, P., & Suryawan, R. F. (2021). Assessment model of employee competence, ground support equipment effectiveness, and satisfaction on service quality. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 55–69. https://doi.org/10.52909/jtla.v1i1.37

Amin, A. P. (2013). Analisis pengaruh tarif penerbangan, jumlah penerbangan dan pendapatan perkapita dalam meningkatkan jumlah penumpang. *Jurnal Bisnis Strategi*, *22*(1), 49–66.

Anggraini, D. (2021). The impact of covid-19 on stock price changes. *Jurnal Bisnis, Ekonomi, Manajemen, Dan Kewirausahaan*, *1*(1), 1–18. https://doi.org/10.52909/jbemk.v1i1.22

Aprillita, D., & Perkasa, D. H. (2021). The impact of the covid-19 pandemic on consumer purchasing power in the online retail sectors. *Jurnal Bisnis, Ekonomi, Manajemen, Dan Kewirausahaan*, *1*(1), 19–26. https://doi.org/10.52909/jbemk.v1i1.23

Ardhianti, M. P., Hermawan, M. A., & Suryawan, R. F. (2022). The impact of lifestyle and service quality on purchase decisions at jne express bekasi. *Jurnal Transportasi, Logistik, Dan Aviasi*, *1*(2), 114–123. https://doi.org/10.52909/jtla.v1i2.64

Assauri, S. (2015). *Manajemen pemasaran*. PT Raja Grafindo Persada.

Brigham, E. F., & Houston, J. F. (2009). *Dasar-dasar manajemen keuangan* (10th ed.). Salemba Empat.

Dewi, S. P., Kristanto, S. B., & Sermawan, E. S. (2015). *Akuntansi biaya* (2nd ed.). IN MEDIA.

Diana, H. I., & Maria, M. M. (2020). The importance of profitability indicators in assessing the financial performance of economic entities. *The Annals of the University of Oradea*, *29*, 219.

Duari, I. P. H. H. (2018). *Tiket penerbangan domestik* (1st ed.). Deepublish.

Fadhilah, F., Suryawan, R. F., Suryaningsih, L., & Lestari, L. (2022). Theoretical perspectives on warehouse operations: A review of four key aspects. *Jurnal Transportasi, Logistik, Dan Aviasi*, *1*(2), 106–113. https://doi.org/10.52909/jtla.v1i2.63

Fadlianto, A., & Sulistyowati, N. (2022). Analyzing the effect of e-farming implementation on supply chain performance in sugarcane plantations. *Journal of Economics, Management, Entrepreneurship, and Business*, *2*(2), 91–106. https://doi.org/10.52909/jemeb.v2i2.84

Fakhira, N. A., Faisal, A. S., Warsito, T., & Indriyati, I. (2020). The marketing strategy analysis of garuda indonesia in gaining lost market after covid-19 pandemic (international flight). *Advances in Transportation and Logistics Research*, *3*, 78–84. https://doi.org/10.25292/atlr.v3i0.241

Fathihani, F. (2021). Empirical analysis of factors influencing stock prices of lq 45-listed companies (2016-2018). *Jurnal Bisnis, Ekonomi, Manajemen, Dan Kewirausahaan*, *1*(2), 71–82. https://doi.org/10.52909/jbemk.v1i1.30

Fathihani, F., & Nasution, I. H. (2021). The influence of capital structure, company growth, profitability, and firm size on earnings management. *Jurnal Bisnis, Ekonomi, Manajemen, Dan Kewirausahaan*, *1*(2), 59–70. https://doi.org/10.52909/jbemk.v1i1.29

Ganatra, V., Sinha, R., Chawla, P., Yi, T. C., Hung, D. M., Kee, N. M. F., & Pandey, R. (2021). A case study on key success factors of garuda indonesia airlines. *International Journal of Tourism and Hospitality in Asia Pacific*, *4*(1), 82–96. https://doi.org/10.32535/ijthap.v4i1.1024

Harywibowo, R., & Hariadi, A. (2022). Effect of preventive maintenance, traffic management, technology, communication support, operator care on osh performance at pt. xyz. *Journal of Economics, Management, Entrepreneurship, and Business*, *2*(2), 142–161. https://doi.org/10.52909/jemeb.v2i2.103

Hasan, M., Musa, C. I., Arismunandar, A., Tahir, T., & Azis, M. (2019). Entrepreneurship education, family capital, and family business performance in makassar, south sulawesi, indonesia. *International Journal of Scientific Development and Research (IJSDR)*, *4*(6), 269–272.

Hategan, C. D., Sirghi, N., Curea-Pitorac, R. I., & Hategan, V. P. (2018). Doing well or doing good: The relationship between corporate social responsibility and profit in romanian companies. *Sustainability*, *10*(4), 1041. https://doi.org/10.3390/su10041041

Heriyanto, D. (2021). The impact of service quality and compensation on crew satisfaction in manning companies. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 31–41. https://doi.org/10.52909/jtla.v1i1.35

Hernawan, M. A., Amonalisa, S., Liauw, J. K., & Kurniawan, I. (2022). Design of item layout with shared storage method at pt. sistama partner. *Journal of Economics, Management, Entrepreneurship, and Business*, *2*(1), 36–51. https://doi.org/10.52909/jemeb.v2i1.101

Ikhsani, K., Widayati, C. C., & Wuryandari, N. E. R. (2021). Effect of risk perception, promotion, and brand trust on purchase intention post-covid-19 era. *Jurnal Bisnis, Ekonomi, Manajemen, Dan Kewirausahaan*, *1*(2), 83–93. https://doi.org/10.52909/jbemk.v1i1.31

Indrayudi, Y. V., An, C., & Ozali, I. (2020). Marketing strategy of garuda indonesia to maintain the business sustainability in 2019. *Advances in Transportation and Logistics Research*, *3*, 265–272. https://doi.org/10.25292/atlr.v3i0.275

Kasmir. (2011). *Analisis laporan keuangan*. PT Raja Grafindo Persada.

Keke, Y., Tobing, N. G. L., & Tanjung, I. (2021). The effect of occupational safety and health on employee performance at pt. angkasa kargo. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 42–54. https://doi.org/10.52909/jtla.v1i1.36

Klius, Y. (2018). Accounting and analytical and management tasks for the classification of industrial enterprises. *Baltic Journal of Economic Studies*, *4*(1), 202–207. https://doi.org/10.30525/2256-0742/2018-4-1-202-207

Kuncoro, H., & Harahap, V. (2021). Effect of electronic flight bag usage and safety culture on flight safety performance at pt. garuda indonesia. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 18–30. https://doi.org/10.52909/jtla.v1i1.34

Kurniawan, R., & Hariadi, A. (2022). Improving the performance of oil palm npk fertilization using risk management and analytic hierarchy process. *Journal of Economics, Management, Entrepreneurship, and Business*, *2*(2), 107–126. https://doi.org/10.52909/jemeb.v2i2.85

Lesmini, L., Najoan, D. J., Ruslani, M. N., Firdaus, M. I., Susanto, P. C., & Suryawan, R. F. (2022). Service strategies of shipping agencies in managing ship arrivals and departures. *Jurnal Transportasi, Logistik, Dan Aviasi*, *1*(2), 70–84. https://doi.org/10.52909/jtla.v1i2.60

Lumi, A. N., & Yosef, M. (2022). The effect of supervision on employee performance at pt. indo suharjaya (narma toserba). *Journal of Economics, Management, Entrepreneurship, and Business*, *2*(1), 1–13. https://doi.org/10.52909/jemeb.v2i1.69

Medias, F. (2018). *Ekonomi makro islam*. UNNIMA Press.

Mulyadi. (2016). *Pengantar manajemen* (5th ed.). UPP AMP YKPN.
Narcizo, R. R., Alves, C. J., & Caetano, M. (2020). The aircraft choice based on the aircraft take-off runway length requirement. *Journal of Aerospace Technology and Management*, *12*, e3120. https://doi.org/10.5028/jatm.v12.1167
Nugroho, I., Pramukanto, F. H., Negara, P. D., Purnomowati, W., & Wulandari, W. (2016). Promoting the rural development through the ecotourism activities in indonesia. *American Journal of Tourism Management*, *5*(1), 9–18. https://doi.org/10.5923/j.tourism.20160501.02
Nunuh, N., & Wulandari, A. (2021). Payroll model for academic staff: A real options approach in a private campus. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(2), 148–156. https://doi.org/10.52909/jemeb.v1i2.58
Nuraeni, N., Ahmad, G., Matin, M., Sulaiman, S., & Izhari, F. (2022). Effect of work motivation and discipline on employee performance mediated by work competency at pt. bprs al salaam. *Journal of Economics, Management, Entrepreneurship, and Business*, *2*(1), 23–35. https://doi.org/10.52909/jemeb.v2i1.80
Ordynskaya, M. E., Silina, T. A., Divina, L. E., Tausova, I. F., & Bagova, S. A. (2021). Functions of cost management systems in modern organizational management. *Universal Journal of Accounting and Finance*, *9*(3), 498–505. https://doi.org/10.13189/ujaf.2021.090324
Pamungkas, S. W. H. (2019). Pengaruh tarif, citra merek, dan kualitas pelayanan terhadap keputusan pembelian tiket maskapai penerbangan citilink. *Journal of Business Administration*.
Parmenas, N. H. (2021). Strategies for maintaining employee well-being during the covid-19 pandemic. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(1), 15–31. https://doi.org/10.52909/jemeb.v1i1.3
Parmenas, N. H. (2022). Employee engagement: Turnover prevention strategies and key to improving performance management in multinational company. *Journal of Economics, Management, Entrepreneurship, and Business*, *2*(1), 14–22. https://doi.org/10.52909/jemeb.v2i1.70
Prijono, B., Kusnadi, K., Arafah, W., & Lukman, B. (2021). Effect of strategic planning, budgeting, and resource-based view on performance mediated by organizational commitment in tni units. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(2), 76–95. https://doi.org/10.52909/jemeb.v1i2.54
Prissia, D., & Daryanto, W. M. (2019). Financial performance analysis and evaluation of airline industry indonesia: Case study of pt garuda indonesia to support vision 2020 "beyond the sky" for the period of 2014-2018. *International Journal of Business, Economics and Law*, *20*(1), 10–21.
Ricardianto, P., Sakti, R. F. J., Sembiring, H. F. A., & Abidin, Z. (2021). Safety performance analysis of state and commercial ships in accordance with solas 1974. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(1), 1–14. https://doi.org/10.52909/jemeb.v1i1.2
Rizqi, A., & Sakinah, N. A. (2021). The effect of transformational leadership on turnover intention through job satisfaction and organizational commitment. *Jurnal Bisnis, Ekonomi, Manajemen, Dan Kewirausahaan*, *1*(2), 94–107. https://doi.org/10.52909/jbemk.v1i1.32
Saputra, T. D., & Kusnadi, K. (2021). Effect of strategic human resources competency and logistic management on performance mediated by strategic leadership. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(2), 96–117. https://doi.org/10.52909/jemeb.v1i2.55
Satria, B. (2021). The effect of transformational leadership and work motivation on employee performance at pt. xyz. *Jurnal Bisnis, Ekonomi, Manajemen, Dan Kewirausahaan*, *1*(1), 36–47. https://doi.org/10.52909/jbemk.v1i1.25
Setiyaningrum, A., Udaya, J., & Efendi. (2015). *Prinsip-prinsip pemasaran* (1st ed.). ANDI Yogyakarta.
Setyawati, A., & Aristiyanto, F. K. (2021). Improving discipline through apron movement control (amc) at pt angkasa pura i adi soemarmo airport. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 1–17. https://doi.org/10.52909/jtla.v1i1.33

Setyawati, A., Huda, M. N., Suripno, S., & Tannady, H. (2021). Analysis of integrated bus terminal services and their impact on customer satisfaction at pulo gebang. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(1), 44–55. https://doi.org/10.52909/jemeb.v1i1.5

Silva, C. J. L., de Andrade, M. O., Falcão, V. A., Fabrício, C., & da Silva, A. (2021). Subsidized regional airlines as a sustainable development mechanism for remote locations heavily dependent on air transportation. *Journal of Sustainable Development*, *14*(4). https://doi.org/10.5539/jsd.v14n4p108

Sinebar, W., & Abdullah, M. (2018). Experiment in an aircraft cabin. *The Physics Teacher*, *56*(8), 556–558. https://doi.org/10.1119/1.5064573

Siregar, S. (2013). *Metode penelitian kuantitatif*. PT Fajar Interpratama Mandiri.

Solihin, A. (2021). The effect of workload, compensation, and career development on employee loyalty at pt. abc. *Jurnal Bisnis, Ekonomi, Manajemen, Dan Kewirausahaan*, *1*(1), 48–58. https://doi.org/10.52909/jbemk.v1i1.26

Sugiyono. (2016). *Metode penelitian kuantitatif, kualitatif dan r&d*. Alfabeta.

Sujarweni, V. W. (2019). *Akuntansi biaya*. Pustaka Baru Press.

Sumaryadi, S., & Kusnadi, K. (2021). Influence of strategic planning and competence on performance mediated by compliance management in tni service. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(2), 135–147. https://doi.org/10.52909/jemeb.v1i2.56

Susanto, P. C., & Parmenas, N. H. (2021). Development of a succession planning model for insurance subsidiaries. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(1), 56–75. https://doi.org/10.52909/jemeb.v1i1.16

Susanto, P. C., Suryawan, R. F., Hartono, H., & Purwoko, B. A. (2021). Analysis of accident-prone areas along the ciawi–puncak road, bogor. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(1), 32–43. https://doi.org/10.52909/jemeb.v1i1.4

Sutrisno. (2009). *Manajemen keuangan: Teori, konsep dan aplikasi* (1st ed.). Ekonisia.

Suyanto, S., Kusnadi, K., & Arafah, W. (2021). Effect of mis and knowledge management on msme performance mediated by organizational commitment in majalengka. *Journal of Economics, Management, Entrepreneurship, & Business*, *1*(2), 118–134. https://doi.org/10.52909/jemeb.v1i2.57

Tamulevičienė, D. (2016). Methodology of complex analysis of companies' profitability. *Entrepreneurship and Sustainability Issues*, *4*(1), 53–63. https://doi.org/10.9770/jesi.2016.4.1(5)

Taslim, M., Arsunan, A. A., Ishak, H., Nasir, S., & Usman, A. N. (2018). Diversity of dengue virus serotype in endemic region of south sulawesi province. *Journal of Tropical Medicine*, *2018*, 9682784. https://doi.org/10.1155/2018/9682784

Wardhani, P. I., & Ully, L. R. R. (2021). The effect of competence and staff placement on performance with job satisfaction as a mediating variable. *Jurnal Bisnis, Ekonomi, Manajemen, Dan Kewirausahaan*, *1*(2), 108–119. https://doi.org/10.52909/jbemk.v4i2.187

Weston, J. F., & Copeland, T. E. (2010). *Manajemen keuangan* (2nd ed.). Binarupa Aksara.

Wijayanti, E., & Santoso, S. (2022). Chse-based tourism and culinary recovery strategy with information system support: Case study dpsp borobudur. *Journal of Economics, Management, Entrepreneurship, and Business*, *2*(2), 65–90. https://doi.org/10.52909/jemeb.v2i2.81

Zadorozhnyi, Z. M., & Ometsinska, I. Y. (2019). Product total cost (work, service): Organizational and methodical aspects of its formation. *Financial and Credit Activity: Problems of Theory and Practice*, *4*(31), 152–162. https://doi.org/10.18371/fcaptp.v4i31.190827