

# Strategies to Revitalize Garuda Indonesia Route Profitability to Improve Financial Performance

Lidia Monika<sup>1,\*</sup> Kinsenary Tjendrasa<sup>1</sup>

<sup>1</sup>*School of Business and Management, Institut Teknologi Bandung, Indonesia*

\*Corresponding author. Email: [lidia\\_monika@sbm-itb.ac.id](mailto:lidia_monika@sbm-itb.ac.id)

## ABSTRACT

PT Garuda Indonesia (Persero) Tbk ("Garuda Indonesia") is the Indonesian flag carrier. In 2011, Garuda Indonesia issued a long term plan: The Strategic Milestones Quantum Leap 2011-2015. The strategy map aims to expand the business massively, including the number of aircrafts in service. However, the world economy slowed down, and the overcapacity market directly impacted the massive expansion of the airline. The company reported losses in 2014. Since then, the company is struggling with fluctuated operating income. This research conducted a Root Cause Analysis for the business problems using 5 Whys. The first result of the analysis is the situation where the number of passengers is reaching saturation point while the regional airline fleet is still expanding, which has caused intense price competition among airlines. The situation forces Garuda Indonesia to keep offering low Passenger Yield in International routes. The second result is the oversupply condition where the available seat capacity is bigger than the market size. These factors impact two out of three main aircraft types operating in the domestic area. The production is declining, and aircraft utilization is low, resulting in negative performance. This research aims to find solutions to these issues by proposing the most suitable alternative scenario to reduce the impact of overcapacity on the financial condition using the Route Profitability ("RP") Model. Calculation of the RP model has considered the effect of the COVID 19 pandemic on the aviation industry.

**Keywords:** Airline, Fleet Utilization, RP Model, COVID 19.

## 1. INTRODUCTION

Commercial airlines provide air transport services to carry passengers, cargo, and mail to destinations. Commercial airlines usually provide scheduled and/or non-scheduled commercial air transport services. Most of the commercial airlines provide scheduled routes with a regular route and scheduled time of departure. The non-scheduled flight offers air transport for passengers, cargo, or other special purposes flight. The non-scheduled flight includes charter flight and hajj flight.

Scheduled airlines develop routes to provide air transport to its customers. It utilizes aircrafts, sets slot time, and service standards to meet its customer needs. A combination of those factors affects the airline's aircraft specification. The airline needs to assign the right type of aircraft to each route to optimize fleet operational.

The size of airline capacity is usually explained with Available Seat-Kilometer measurement. The Available seat-kilometre ("ASK") is the number of passenger seats offered by the airlines multiplied by kilometres flown. Since not all of the seats offered are filled with passengers, the airline industry measures the amount of capacity filled with Revenue Passenger

This research relies only on secondary data by applying specific rates for each revenue and cost component in the RP Model based on an annual report, published rate, published data, modification of internal data and other sources. This research was prepared based on numerous assumptions that were done before or during the COVID-19 pandemic. The calculations and recommendations are subject to uncertainties, risks and other factors that can cause the actual results to differ materially from the expected results.

**2. LITERATURE REVIEW**

Commercial airlines provide air transport services to carry passengers, cargo, and mail to destinations. Commercial airlines usually provide scheduled and/or non-scheduled commercial air transport services. Most of the commercial airlines provide scheduled routes with a regular route and scheduled time of departure. The non-scheduled flights offer air transport for passengers, cargo, or other special purposes flights. The non-scheduled flights include chartered flights and hajj flights.

**2.1. Relation of Airlines Cost and Aircraft Utilization**

Cost levels are directly related to the number and type of aircraft in a given fleet. An airline with a small fleet will proportionally incur higher costs in certain areas, in terms of spares and crew, than an airline with a larger fleet. Also, an airline’s ability to maximize its fleet utilization is inhibited by certain commercial factors [1].

**2.2. Operating Lease**

The most interesting feature of an operating lease is the cancellation option. This option gives the lessee the right to cancel the lease contract before the expiration date. If the option to cancel is exercised, the lessee must return the equipment to the lessor. The value of a cancellation clause depends on whether future technological or economic conditions are likely to make the value of the asset to the lessee less than

the value of the future lease payments under the lease [2].

**3. RESEARCH METHODOLOGY**

This research conducts external analysis using PESTEL and Porter’s 5 Forces analysis, and it can be concluded that the aviation market has become a very competitive industry in a price-sensitive market. The government’s program to attract 20 million international tourists per year and build 5 Super-Priority Destinations gives an opportunity for Garuda Indonesia to grab new markets. It is important considering the impact of Covid-19 pandemic on the airline industry. Airline production is estimated to reduce by 50% in 2020 and will not recover until 2023.

This research also conducts internal analysis of Garuda Indonesia by comparing its revenue and cost performance to other airlines. In general, Garuda Indonesia’s Passenger Yield ratio is below other airlines. Garuda Indonesia’s ratio of Revenue per ASK and Cost per ASK is also lower compared to other airlines.

This research determines the most suitable strategy by comparing future aircraft profitability from several scenarios using the RP Model approach. The RP Model is one management approach that provides the financial position on a specific flight. It allocates cost and revenues incurred on every flight and provides a profitability position for a particular flight.

Table 1 shows the comparison of the concept of

**Table 1.** Concept Comparison of the RP Model and profit Loss.

	<b>Aircraft Profitability – The RP model</b>	<b>Operating Income – Financial Statement</b>
<b>Revenue</b>	<u>Aircraft Revenue</u> Consist of all revenue generated from a scheduled flight may consist of revenue from the passenger, cargo, and ancillary.	<u>Operating Revenue</u> Consists of revenue generated from the scheduled flight, non-scheduled flight, and other operating.
<b>Cost</b>	<u>Aircraft Cost</u> Consist of all cost occurred in a flight, may consist of the cost related to the fleet, flight, crew, and overhead.	<u>Operating Cost</u> Consists of related and unrelated scheduled flight costs. May consist of cost to operate the airline's route or other unrelated costs such as charter cost, other operating costs such as loss exchange.
<b>Result</b>	<u>Aircraft Profitability</u> The result of Aircraft Revenue – Aircraft Cost	<u>Operating Income</u> The operating result from operating activities, from the scheduled and non-scheduled flight.

**Table 2.** List of Revenue Component of The RP Model.

<b>Revenue Component</b>	<b>Allocation Based</b>
Passenger (Pax) Revenue	Pax Yield x RPK
Freight Revenue	Cargo Yield x RPK
Mail Revenue	
Other Revenue	base on %-age of Net Pax, Freight & Mail Revenue

**Table 3.** List of Cost Component of The RP Model

Cost Component	Fix/Variable	Cost Posting		Allocation Based
		A/C type	Non-A/C type	
Administration – HO & BO	Fixed		√	Net Pax Revenue, Freight & Mail
Air Traffic Control - Route Charge	Variable	√		Flight Distance
Air Traffic Control - Terminal Navigation Charge	Variable	√		Number of Landing
Aircraft Lease	Fixed	√		Per Aircraft
Aircraft Maintenance*	Fixed	√		Flight Hours
Cabin Crew Person	Fixed		√	Number of Personnel
Cabin Crew Travel	Variable		√	Block Hour
Cockpit Crew Person	Fixed	√		Number of Personnel
Cockpit Crew Travel	Fixed - Variable		√	Block Hour with minimum
Credit Card Commission	Variable		√	Net Pax Revenue, Freight & Mail
Freight Commission	Variable	√		Aircraft Type
Fuel Aircraft	Variable	√		Net Freight & Mail
Handling	Variable	√		Block Hour
Insurance	Fixed	√		Number Of Landing
Landing	Variable	√		Per Aircraft Type
Loan Payment	Fixed	√		Number of Landing
Parking Fee	Variable	√		Per Aircraft
Marketing	Fixed		√	Parking hour
On-Board Service	Variable	√		Net Pax Revenue, Freight & Mail
Passenger Commission	Variable	√		Number of Pax Carried
Reservation	Variable		√	Net Passenger Revenue
Sales Organization	Fixed		√	Number of Passenger Carried
Station	Fixed		√	Net Pax Revenue, Freight & Mail
Storing Fee	Variable	√		Net Pax Revenue, Freight & Mail
Variable Maintenance	Fixed - Variable	√		Aircraft Type

Route Profitability and Operating income in Financial Statement. Table 2 and 3 are the list of revenue and cost components in the RP Model that are directly/not directly related to certain aircraft types. The list also provides the allocation method used in this research.

**4. RESULTS**

**4.1 Operating Revenue Comparison**

Since each airline has a different number of production and capacity, the airline's industry usually uses "Passenger Yield" and Revenue Available Seat Kilometer ("RASK") to compare revenue performance among airlines.

Figure 1 shows a comparison of Garuda Indonesia passenger yield with other airlines. It is present in USc. In general, Garuda Indonesia's Passenger Yield is still below the average data. The Passenger Yield for the domestic route is above other non-Japan home

based airlines but below airlines with a home base in Japan. This trend indicates good revenue management

Figure 2 shows a RASK comparison of Garuda Indonesia and other benchmarked airlines. From this figure, it can be seen that in general RASK of Garuda Indonesia is below other airlines. In 2019, the RASK of the domestic route increased significantly from the previous year.

**4.2 Operating cost Comparison**

In line with operating revenue comparison, it is also challenging to directly compare costs among airlines. The airline industry usually uses cost ratio measurement known as Cost per Available Seat-Kilometre (CASK).

Figure 3 shows comparison of Garuda Indonesia's CASK and other airlines. It can be concluded that the CASK of Garuda Indonesia's airlines is below other airlines that indicates a good cost-efficiency.

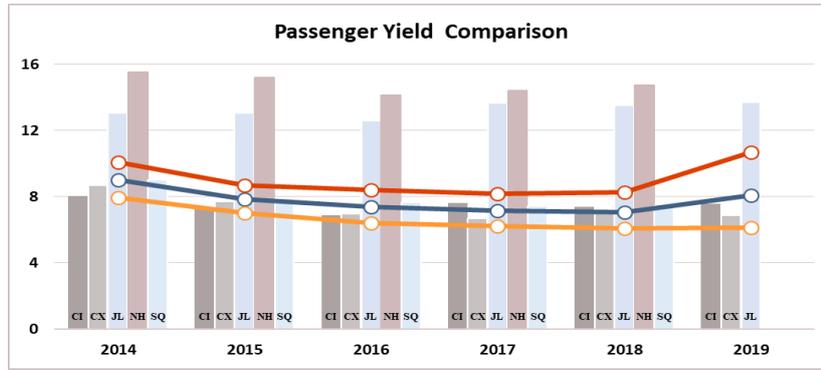


Figure 1 Comparison of Passenger Yield between Benchmarked Airlines [2-6]

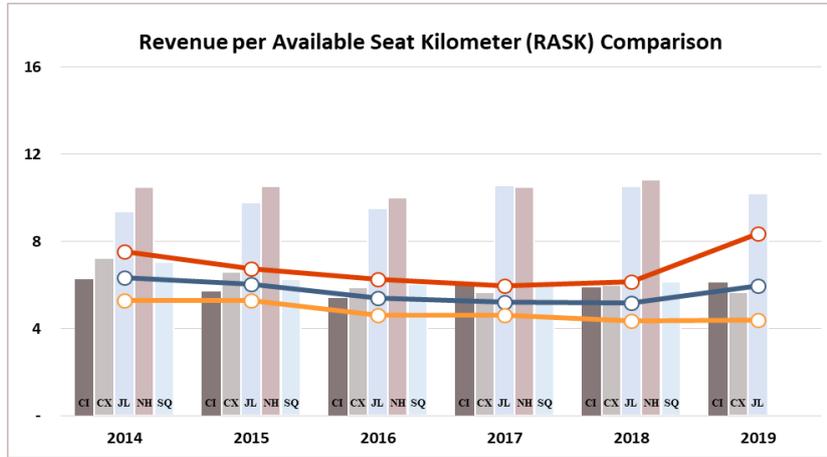


Figure 2 Comparison Garuda Indonesia RASK Vs. Benchmarked Airlines [2-6]

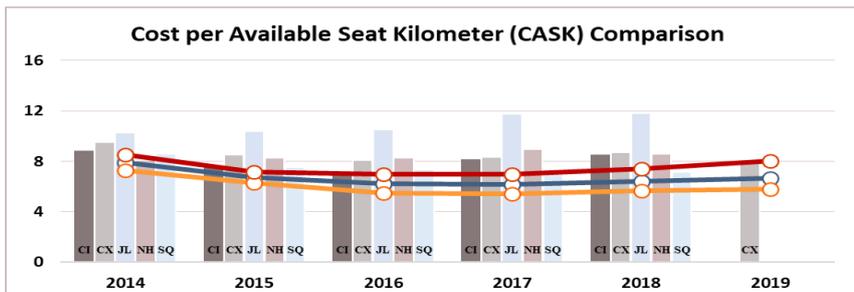


Figure 3 Comparison Garuda Indonesia CASK Vs. Benchmarked Airlines [2-6]

### 4.3 Finding from Root Cause Analysis

From the root cause analysis above, it can be concluded that Garuda Indonesia’s income statement fluctuates throughout the year because the main product of Garuda Indonesia, which is passenger ticket, has  $RASK < CASK$ . There are two root causes of this issue: (1) The situation in international routes where the market faces overcapacity and the consumer is price sensitive. This situation has caused intense price competition among airlines in a price-sensitive market. This situation forces Garuda Indonesia to keep offering low price tickets with no guarantee of full passenger load factor. (2) Oversupply of Garuda Indonesia aircraft in domestic routes cause the available seat capacity becoming bigger than the

market size. This situation results with two out of three aircraft types operating in domestic routes having low utilization and contributes to losses.

## 5. DISCUSSION

This research proposes strategies as follow: (1) Propose to cooperate with the government to bring in 20 million international tourists to the nearest HUB or directly to the nearest airport of the Five Super Priority Destinations and implement cost-sharing cooperation with the scheme to reduce the risk of loss from the additional capacity to bring 20 million international tourists to Indonesia. (2) Collaborate to develop a marketing campaign, especially to international tourists to promote Indonesia and Garuda Indonesia. The target is to put Garuda Indonesia as the

**Table 4.** Profitability Comparison of aircraft #1

	Scenario I	Scenario II	Scenario III	Scenario IV	Scenario V	Scenario VI
2020	-	-1%	-12%	0%	0.6%	-608%
2021	-	1%	24%	0%	-0.4%	100%
2022	-	9%	35%	0%	-29.1%	100%
2023	-	18%	42%	0%	-50.1%	100%
2024	-	29%	52%	27%	-74.3%	100%
2025	-	47%	68%	9%	-116.8%	100%
2026	-	81%	97%	-22%	-192.8%	100%
2027	-	159%	164%	-94%	-367.1%	100%
2028	-	404%	472%	-428%	-1174.2%	100%
2029	-	403%	630%	-757%	-1692%	-100%
	-	20%	35%	0%	-51%	-56%

**Table 5.** Profitability Comparison of aircraft #2

	Scenario I	Scenario II	Scenario III	Scenario IV	Scenario V
2020	0%	0%	0%	-12%	-590%
2021	0%	0%	0%	-24%	82%
2022	0%	0%	0%	-90%	139%
2023	0%	0%	-41%	-257%	301%
2024	0%	-96%	1732%	-2469%	2324%
2025	0%	9%	18%	-179%	51%
2026	0%	8%	-10%	-125%	1%
2027	0%	3%	-17%	-114%	-11%
2028	0%	0%	0%	-101%	0%
2029	0%	0%	0%	-101%	0%
	0%	6%	10%	-348%	-129%

top of mind for travellers to Indonesia. (3) Increase aircraft utilization that mainly operates in the Domestic Market and minimizes the impact on financial performance. This research proposes the most suitable strategies by calculating future aircraft profitability using the RP Model. Results are shown on Table 4 and Table 5.

## 6. CONCLUSION

This research proposes revitalization strategies for Garuda Indonesia to strengthen its financial performance as follow: (1) Propose to cooperate with the government to bring in 20 million international tourists to the nearest hub or directly to the nearest airport of the Five Super Priority Destinations and implement cost-sharing cooperation with the scheme to reduce the risk of loss from the additional capacity to bring 20 million international tourists to Indonesia. (2) Collaborate to develop a marketing campaign, especially to international tourists to promote Indonesia and Garuda Indonesia. The target is to put Garuda Indonesia as the top of mind for travellers to Indonesia. (3) Strategies to increase aircraft utilization that mainly operates in the domestic market and minimize the impact on financial performance.

Using the RP Method, this research proposes the most suitable strategies to increase aircraft utilization that mainly operates in the domestic market and minimize the impact on financial performance, as

follow: (1) To transfer the aircraft #1 to the LCC subsidiary by the end of 2020. This research predicts there will be an improvement in financial performance. The loss will reduce gradually in the period of 2021-2026, and the aircraft is predicted to be profitable in 2027. The aircraft utilization is predicted to be improved from 1:48 hours per day to 5:37 hours per day. (2) The most suitable alternative scenario to increase utilization and reduce the loss for aircraft #2: (a) With a realistic assumption, this final project predicts that the best scenario is for Garuda Indonesia to sublease one aircraft to another company and be profitable in 2025. This scenario will improve aircraft utilization from 3:31 to 8:07 hours per day. (b) With an optimistic assumption, It assumed that Garuda Indonesia could sublease six aircraft to other companies by the end of 2023. This final project predicts that with this scenario, the aircraft#2 will be profitable in 2024. This scenario will improve aircraft utilization from 3:31 to 8:07 hours per day. This time the airlines experienced turbulence due to overcapacity, a price-sensitive market, and the COVID-19 pandemic. The airline needs to adopt a survival strategy to reduce costs and maintain a healthy cash flow.

This research can be developed for further research, especially for a more detailed strategy in improving international routes. In the case of the next research, which also assumes collaboration using a

cost sharing scheme with the government, it is necessary to identify the origin country of the targeted tourists. Therefore, the next research will be able to calculate it in detail.

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