THESIS BY PROJECT

THE PROJECT OF THE LARGEST PASSENGER AIRCRAFT DEPLOYMENT EMIRATES A380 IN I GUSTI NGURAH RAI INTERNATIONAL AIRPORT BALI

POLITEKNIK NEGERI BALI

I MADE JULI ADHI PUTRA

POLITEKNIK NEGERI BALI
BADUNG
2024

THESIS BY PROJECT

THE PROJECT OF THE LARGEST PASSENGER AIRCRAFT DEPLOYMENT EMIRATES A380 IN I GUSTI NGURAH RAI INTERNATIONAL AIRPORT BALI

POLITEKNIK NEGERI BALI

I MADE JULI ADHI PUTRA
NIM 2215885030

TOURISM PLANNING STUDY PROGRAM
APPLIED MASTER PROGRAM
TOURISM DEPARTMENT
POLITEKNIK NEGERI BALI
BADUNG
2024

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET, DAN TEKNOLOGI
POLITEKNIK NEGERI BALI
Jalan Kampus Bukit Jimbaran, Kuta Selatan, Kabupaten Badung, Bali – 80364
Telp. (0361) 701981 (hunting) Fax. 701128
Laman: www.pnb.ac.id Email: poltek@pnb.ac.id

DECLARATION OF AUTHENTICITY

The undersigned below

Name : I Made Juli Adhi Putra

NIM : 2215885030

Study Program : Tourism Planning, Applied Master Program, Tourism Department, Politeknik Negeri Bali

I hereby declare that the thesis by project entitled "The Project of The Largest Passenger Aircraft Deployment Emirates A380 in I Gusti Ngurah Rai International Airport Bali" is truly free from plagiarism. Shall in the future proven that there is plagiarism in this scientific paper, then I am willing to accept sanctions in accordance with the implemented regulation.

Thus I made this statement letter to be used properly.

Badung, June 20, 2024

I Made Juli Adhi Putra

THESIS BY PROJECT

Prepared as One of the Requirements to Obtain
The Master's Degree in Applied Tourism (M.Tr.Par)
Tourism Planning Study Program, Applied Master Program
at Tourism Department Politeknik Negeri Bali

POLITEKNIK NEGERI BALI

I MADE JULI ADHI PUTRA
NIM: 2215885030

TOURISM PLANNING STUDY PROGRAM
APPLIED MASTER PROGRAM
TOURISM DEPARTMENT
POLITEKNIK NEGERI BALI
BADUNG
2024

SUPERVISOR APPROVAL SHEET

THE PROJECT OF THE LARGEST PASSENGER AIRCRAFT DEPLOYMENT EMIRATES A380 IN I GUSTI NGURAH RAI INTERNATIONAL AIRPORT BALI

Proposed by:

I MADE JULI ADHI PUTRA

NIM : 2215885030

Approved by:

Supervisor I,

Prof. Ni Made Ernawati, MATM., PhD
NIP 196312281990102001

Supervisor II,

Dr. I Made Darma Oka, S.ST. Par., M.Par
NIP 196510202000121001

Head of Tourism Department

Dr. Ni Nyoman Sri Astuti, SST.Par, M.Par
NIP 198409082008122004

Head of Applied Master of
Tourism Planning Study Program

Dr. Dra. Ni Gusti Nyoman Suci Murni, M.Par
NIP 196405251990032001

THESIS BY PROJECT

THE PROJECT OF THE LARGEST PASSENGER AIRCRAFT DEPLOYMENT EMIRATES A380 IN I GUSTI NGURAH RAI INTERNATIONAL AIRPORT BALI

Has Been Tested based on **Decree of the Director of Politeknik Negeri Bali Number: 04791/PL8/TU.01.04 Dated 21 June 2024** and Assessed on:

Day: Monday, Date: 08 July, Year: 2024

ASSESOR

	Name of Assessor Team	Signature
Head	**Prof. Ni Made Ernawati, MATM., PhD** **NIP. 196312281990102001**	
Member	**Dr. I Made Darma Oka, S.ST. Par., S.Sos., M.Par** **NIP. 196510202000121001**	
Member	**Dr. I Ketut Budarma M.Par, MMTHRL** **NIP. 196212311990101002**	
Member	**Dr. Made Satria Prananda Putra, SH., SE., MM** **NIP. 198912302022031003**	
Member	**Mr. Muhammad Fachrul** **Practitioner/Industry**	

Acknowledge by:

Head of Tourism Department

Politeknik Negeri Bali

Dr. Ni Nyoman Sri Astuti, SST.Par., M.Par

NIP. 198409082008122004

PREFACE

Praise and gratitude the author prays to Ida Sang Hyang Widhi Wasa/ Almighty God because of His blessings and grace the author was able to complete the thesis entitled "**The Project of the Largest Passenger Aircraft Deployment Emirates A380 in I Gusti Ngurah Rai International Airport Bali"**.

The preparation of this thesis is one of the requirements for graduation in the Tourism Planning Study Program, Applied Master Program, Tourism Department, Politeknik Negeri Bali. On this occasion the author would like to thank all those who have helped in completing this thesis, to:

1. I Nyoman Abdi, SE, M.eCom., as Director of Politeknik Negeri Bali, who has given the writer opportunity to gain knowledge at Politeknik Negeri Bali.
2. Dr. Ni Nyoman Sri Astuti, SST.Par, M.Par., as the Head of Tourism Department at Politeknik Negeri Bali, for the direction and guidelines.
3. Putu Tika Virginia, S.Pd., M.Pd., as the Secretary of Tourism Department at Politeknik Negeri Bali, for the direction and guidelines.
4. Dr. Dra. Ni Gusti Nyoman Suci Murni as the Head of Applied Master of Tourism Business Planning Study Program for the direction and guidelines.
5. Prof. Ni Made Ernawati, MATM., Ph.D as Supervisor I who has been willingly taking her time to give guidance and provide all supports to complete this thesis proposal.
6. Dr. I Made Darma Oka, S.ST. Par., S.Sos., M. Par., as Supervisor II who provide guidance and advise to complete this thesis proposal.

7. Dr. I Ketut Budarma, M.Par, MMTHRL as internship coordinator of applied master, tourism planning study proram who has been extending great assistance.
8. Mr. Mohammad Al Attar as Country Manager of Emirates Airline Indonesia giving opportunity to do internship to the writer in Emirates Airline Bali.
9. All of staff in Emirates Airline Bali who have always gives their support, ideas and great to always support in every condition until the writer can complete this thesis proposal.
10. General Manager of PT. Angkas Pura I, Station Manager PT. Jasa Angkas Semesta, Station Manager PT. JAS Aero Engineering, General Manager PT. Aerofood ACS and all stakeholders team supporting during the interview.
11. All Lecturers of Tourism Department for the knowledge and education given to the writer and all the students
12. I Made Rata and Ni Ketut Sutiti, my lovely parents for the supports and loves.
13. Ni Wayan Januwati, my lovely wife, for the endless supports and loves.
14. All parties that can't be mentioned one by one, who always give their support and help during the process of this thesis.

Constructive criticism and suggestions from various parties are needed to complete the writing of this thesis. The author hopes that this thesis can be useful for all parties. Finally, the author would like to apologize if there are still errors in writing this thesis.

Badung, June 2024

Author

TABLE OF CONTENTS

LIST OF TABLE

LIST OF FIGURES

LIST OF ATTACHMENT

THE PROJECT OF THE LARGEST PASSENGER AIRCRAFT DEPLOYMENT EMIRATES A380 IN I GUSTI NGURAH RAI INTERNATIONAL AIRPORT BALI

I Made Juli Adhi Putra
NIM: 2215885030

ABSTRACT

The largest passenger aircraft deployment Emirates Airbus A380 in Bali was a biggest project for Indonesian aviation with purpose to assess the compatibility of the airport in handling Airbus A380 aircraft, the readiness of ground service providers to handle the aircraft and to analyse how was the result of the project. The methodology using mix method qualitative and quantitative data which collected by observation, interview, checklist and documentation. The data analysis focusing on 4 pillars of project success measurement include time, cost, health and safety and profitability. Project operation stage started from initiation stage with feasibility study by Emirates, followed by planning stage, execution stage, monitoring stage and closing stage. The airport compatibility was assessed jointly by Emirates and airport authorities to determine area of concerns and agreed action items to comply with ICAO Annex 14 – Aerodrome for Code F aircraft (A380) operation. The readiness of ground service providers assessed by Emirates consist of ground support equipment availability and compatibility to serve A380 aircraft, personnel training/license and updated procedures. Each party prepared safety risk assessments to identify potential hazards, probability, mitigation and its consequences in order to manage the risk within the acceptable risk level. It concluded airport was compatible and ground service provider ready to handle the aircraft and project commenced. The result of the project was measured using 4 pillars where each party has completed the assigned action item timely, cost associated, health and safety performance and profitability with successful result. Proud of the Indonesian aviation stakeholders for great milestone in handling regular A380 operation in Bali, the first A380 regular operation in Indonesia and create fabulous publicity for airport and Emirates.

Keyword : Aviation Project, Airbus A380, Project Stage, Project Result, Emirates Bali

CHAPTER I

INTRODUCTION

1.1. Background

The tourism and Air Transport industry complement each other. Tourism depends on transportation to bring visitors, while the transportation industry depends on tourism to generate demand for its services. The growth in the tourism industry directly reflects on air transportation Khan (2022). Air transport link with tourism have always been noticeable. There is no doubt that the future development of the tourism industry depends on a gradual increase in air services Zajac (2016). According to Khan (2022) accessibility is the main function behind the basics of tourism transport. To access the areas that are mainly aimed, tourists will use any transportation mode. However, air transport is the main mode of international tourism. Air transport plays a dominant role in inter-regional movements of tourists, which normally entails travel over long-distance. Growth rates of international air traffic are pegged with growth rates of international tourism.

Indonesia as one of the developing countries with more than 280 million populations spreading-out in more than sixteen thousand islands become high potential market in aviation business development. Although during Covid-19 pandemic, a strict travel restriction was imposed by each state following WHO guidance to control the pandemic, however with the return of air travel since early 2022 and travel restriction gradually uplifted by each country, it shows an indication

of high travel demand after 2 years travel restriction as the impact of Covid-19 pandemic.

The introduction of visa on arrival in March 2022 and quarantine slowly uplifted by Indonesian government, Bali as tourist destination slowly recover it tourism business. According to Skirka (2023) on The National News, Tripadvisor's most popular destination 2023 are Dubai, the number one most popular destination and followed by Bali in number two. Then London (United Kingdom), Rome (Italy), Paris (France), Cancún (Mexico), Crete (Greece), Marrakesh (Morocco), Dominican Republic and Istanbul (Turkey) subsequently as top 10 destination 2023. With 97 countries are currently having visa on arrival facility (Karim, 2023) including South East Asia countries could enjoy free visa facility, these numbers are on continues review by the government of Indonesia, its likely Bali tourism would back to 2019 figure by 2024.

Emirates airline, the largest air transport services in the world had resume its operation in I Gusti Ngurah Rai International Airport Bali since May 1st, 2022 with initial 5 flights per week, then followed by daily flight in July 2022, adding 5 flight per week became total 12 flight per week in September 2022 and start its double daily services starting November 2022 using their Boeing B777-300ER aircraft. Before Covid-19 pandemic, Emirates operate 14 flights per week from Dubai-Bali vv (vice versa) and 7 flights per week from Auckland-Bali vv. In Summer 2023, Emirates serve more than 130 destinations across 6 continents and connecting Bali to the world.

Emirates airline as the biggest operator of Airbus A380 with currently having 119 units of A380 aircraft in service, keep expanding their network for potential A380 operations. Indonesia is one of the countries where Emirates operate the flight to/from Dubai non-stop and currently connecting both Jakarta and Denpasar using Boeing B777-300ER aircraft. Post pandemic, Emirates gradually reintroducing their A380 aircraft into operation to cope the demand of travel and expected to return all of pre-pandemic A380's route by end of Summer Season 2023. Currently more than 40 cities served by Emirates A380 aircraft including Southeast Asia major city such as Singapore, Bangkok and Kuala Lumpur as well as Australian and New Zealand main cities such as Sydney, Melbourne, Brisbane, Perth and Auckland.

Indonesia becomes a potential market to deploy A380 aircraft by Emirates, however such a strange that none of foreign airlines operating in Indonesia using A380 aircraft. There is no experience of A380 aircraft operating in Indonesian's airport especially in both Indonesia main gateway Jakarta and Bali. There are several questions on why there is no single A380 aircraft operated in Indonesia's airport, does the airport in Indonesia able to handle A380, does the ground handling equipment available to handle A380 aircraft, etc. With the high demand of travel into Indonesia, Emirates assigned A380 operation project into I Gusti Ngurah Rai International Airport Bali. This project started in August 2022 and Bali to be the first airport in Indonesia in handling iconic aircraft of A380, the largest passenger aircraft in service this century with more than 600 seats capacity. This thesis by project entitled "**The**

Project of the Largest Passenger Aircraft Deployment Emirates A380 in I Gusti Ngurah Rai International Airport Bali" is prepared by the author who are also working as Airport Services Manager of Emirates Airline in Bali and involve entirely in the project.

1.2. Formulation of Problems

Considering there is no experience of handling A380 aircraft in airports of Indonesia including Bali, there are a lot of preparation to be taken to ensure A380 project could be successfully implemented to ensure aircraft servicing are made in safe and efficient. A lot of stake holders involve in this project and there are several problems formulated in this research project, they are below:

a. How is the compatibility of I Gusti Ngurah Rai International Airport for A380 aircraft?
b. How is the readiness of I Gusti Ngurah Rai International airport in handling A380 aircraft, from the aspect of ground service provider providing engineering, ground handling, catering?
c. How is the result of the project of the largest passenger aircraft deployment Emirates A380 in I Gusti Ngurah Rai International Airport Bali?

1.3. Objective of The Study

Operation business project related deployment of A380 aircraft in Bali airport by Emirates are having objectives as follow:

a. To assess airport compatibility for A380 operation

b. To assess readiness of Bali airport ground service provider in handling A380 aircraft

c. To analyze how success the project of the largest passenger aircraft deployment Emirates A380 in I Gusti Ngurah Rai International Airport Bali

1.4. Significances of The Study

a. This research project will provide benefit to aviation institution, it becomes a practical lesson learnt, knowledge and experience as well as sharing information on how A380 operation is commenced, readiness of airports and stakeholders. The institution is likely:
   1) Aviation Stakeholders mainly consist of civil aviation authorities, airport operator, air navigation services, airline operator and ground handling agent.
   2) Educational institution who majority concentrating in aviation business such as airport, airlines and ground handling.

b. This research project will also provide commercial benefit to the airports in term of publicity since the airport can handle the largest passenger aircraft operated in the century.

c. The business project also will provide economic benefit for Emirates in term of brand value in Indonesia and profitability of Emirates as a company.

d. Lastly, this business project will provide economic benefit for airports in gaining more revenue in term of passenger traffic growth, aircraft landing, parking and storage fee and Bali in general as tourism destination.

CHAPTER VI

CLOSING

6.1 Conclusion

Airbus A380 aircraft is the largest passenger aircraft in this century and the project for deployment of Emirates A380 aircraft was started by assessing the airport compatibility for handling A380. Although feasibility study was conducted by Emirates, there were some facilities required for improvement in order A380 can be safely operated. Check list for airport development was agreed based on joint safety risk assessment with timeline to ensure airport declared compatible for A380. The compatibility of the airport must be supported by readiness of the Ground Service Provider in handling A380 aircraft, these including availability of equipment and trained personnel. With the combination of airport compatibility and readiness of Ground Service Providers, the A380 project can be commenced.

The result of the project was analysed based on 4 indicators include time, cost, health & safety and profitability. Time was used to measure the targeted time for each action items which contribute to the deadline for project start date. Contingency plan was made in case some action items did not completed according to targeted time to ensure implementation of A380 can be achieved. Overal from 41 check list items, 97.56% was met the deadline before project started. 2.44% overdue completed after the project started however contingency plan was implemented to ensure project can be commenced as per target date. Cost associated was contributed by Emirates, Airport Operator and Ground Service Providers where

cost components and allocation to individual company. Cost contributed by the airport operator and ground service providers become an investment cost while cost Emirates was contributed by several departments which controlled by each department. Health and Safety performance was analysed against how the company prepare safety risk assessment and management of change. This will contribute to safety performance of the project, on how many occurrence reports was accounted for and what was the impact with the continuity of the project. Safety Performance Indicator (SPI) measured based on 3 criteria are aircraft damage, loading reconciliation error and workplace injure where zero events related this SPI. Accident and Incident events also zero case. The safety report consist of 1 ground safety and 1 engineering safety were not accounted for SPI events. Profitability was assessed based on investment by airport and ground service providers where they get benefit for the increase revenue to handle A380 aircraft and Emirates generate revenue due to A380 having more seats and high load factor with average 92.55% arrival and 92.82% for departure during the first 6 months indicating high revenue generated. The project deployment of largest passenger aircraft Emirates A380 was successfully implemented and become great milestone for aviation industry in Indonesia where this the first regular operation of A380 in Indonesian airport.

6.2 Recommendations

The aviation industry in Indonesia thanks Emirates for their contribution in deploying first ever superjumbo passenger aircraft Airbus A380 in Bali which become viral in social media. This milestone proves the airport in Indonesia is

capable to handle superjumbo aircraft A380. Some recommendation for deployment of Airbus A380 at the airport as follow:

1. Suggested 3 fingers aviobridge for A380 aircraft with one of them can access to upper deck to provide customer boarding experience on A380 compare using 2 fingers aviobridge
2. Emirates to assess capability of Soekarno-Hatta International Airport for A380 deployment as proudly for Indonesia aviation sector and deploy additional A380 flight in Bali.

REFERENCES

Airbus SAS. (2005). *A380 Aircraft Characteristic, Airport and Maintenance Planning* (Revision No 17).

Aminbakhsh, S., Gunduz, M., & Sonmez, R. (2013). Safety risk assessment using analytic hierarchy process (AHP) during planning and budgeting of construction projects. *Journal of Safety Research*, *46*, 99–105. https://doi.org/10.1016/j.jsr.2013.05.003

Arikunto, S. (2010). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.

Chan, A.P.C. et al. (2002). Framework of success criteria for design/build projects. *Journal Managerial Engineering*, *18*(3), 120 – 128.

Doefler, Isabel and Baumann Oliver. (2014). Learning from a drastic failure: the case of the Airbus A380 program. *Journal of Industry and Innovation*, 21(3) 197-214

Emirates.com. (n.d.). Retrieved July 16, 2023, from https://www.emirates.com/id/english/experience/our-fleet/a380/

Faila Sufa, M. (2012). Identifikasi Kriteria Keberhasilan Proyek. Performa (2012), Vol 11, No.1: 19-22.

Heizer, Jay and Barry Rander. (2014). *Manajemen Operasi, Manajemen Keberlangsungan dan Rantai Pasokan Edisi 11*. Alih Bahasa: Hirson Kurnia, Ratna Saraswati dan David Wijaya. (2015). Jakarta: Salemba Empat.

ICAO. (2004). Aerodromes Annex 14 to the Convention on International Civil Aviation International Civil Aviation Organization International Standards and Recommended Practices Fourth Edition Volume I Aerodrome Design and Operations. http://www.icao.int

Karim, S. (2023). Surat Edaran Nomor IMI-0133.GR.01.01 Tahun 2023 Tentang Kebijakan Keimigrasian Mengenai Layanan Visa Kunjungan Saat Kedatangan Elektronik (Elektronik Visa On Arrival/E-VOA), Visa Kunjungan Saat Kedatangan (Visa On Arrival), Dan Bebas Visa Kunjungan Untuk Mendukung Pariwisata Berkelanjutan Pada Masa Pandemi Corona Virus Disease 2019. In Kementerian Hukum dan Hak Asasi Manusia Republik Indonesia, Direktorat Jenderal Imigrasi (pp. 1–17). Direktur Jenderal Imigrasi.

Khan, S. (2022). The pivotal role of the aviation industry to the hospitality and tourism industry. International Journal of Creative Research Thoughts , Vol 10, 1–14.

Mueller, R., & Witter, A. (2014). Aviation Risk and Safety Management. Methods and Applications in Aviation Organizations. Springer.

Nelson, C. (2020). Investigating the Airbus A380: was it a success, failure, or a combination?.

Skirka, H. (2023, January 18). Dubai is world's number one destination in 2023, says Tripadvisor. The National News. https://www.thenationalnews.com/travel/2023/01/18/dubai-is-worlds-number-one-destination-in-2023-says-tripadvisor/

Sugiyono. (2015). *Metode Penelitian Kombinasi (mix Metods)*. Bandung: Alfabeta.

Sugiyono. (2016). *Metode Penelitian Kuantitatif Kualitatif dan Kombinasi (mixed Methods)*. Bandung: Alfabeta.

Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.

Zajac, G. (2016). The role of air transport in the development of international tourism. Journal of International Trade, Logistics and Law (Vol. 2, Issue 1). http://www2.anac.gov.br/dadosComparativos/DadosComparativos.asp,