

A COMPETITIVE ANALYSIS OF AIRLINE INDUSTRY IN INDONESIA REGARDING ASEAN OPEN SKIES POLICY CASE STUDY : GARUDA INDONESIA AIRLINES

Cintya Dwi Lestari¹, Lathifah Husnun², Salahudin Rafi³, Novi Indah S⁴

1. STMT Trisakti, 2. STMT Trisakti, 3. STMT Trisakti, 4. STMT Trisakti

✉corresponding author: cintya.dwilestari@yahoo.com

Abstract: At this era of globalization, air transport is at its peak. The purpose of this research is to review how airline in Indonesia able to survive for the sustainable air transport, therefore the potentials can be identified to develop by the airline in the future constantly. The focus of this research is to find out how strength the aviation industry in order to survive in this cannibalism market. The researchers focus on Garuda Indonesia airline. The method of the research was descriptive qualitative with SWOT analysis. Data sources used primary data and secondary data. Primary data sources were taken from interview, while secondary data used existing theories such as articles, journals, website, and other documents related to the research problem. This study concludes that with the ASEAN open sky, cannibalism in the aviation industry is increasingly tight. Therefore, Indonesia should maintain sustainable transportation, in this case the airline, that can be equal with other ASEAN airlines. **Keywords:** ASEAN, open skies policy, aviation industry, cannibalism market, sustainable air transport.

Introduction

Open Sky Policy has been signed by 10 ASEAN countries; Thailand, Indonesia, Philippine, Singapore, Malaysia, Brunei Darussalam, Vietnam, Myanmar, Laos, and Cambodia in Bali Concord II declared in the ASEAN Summit (Konferensi Tingkat Tinggi (KTT) ASEAN) which was held on October 2003. The core of the meeting was that each of ASEAN countries by signing the policy have agreed on the changes and obliged fully to implement the Open Sky Policy from 2015 to 2020.

Open Sky is regulated in UU. No. 1 Year 2009 About Aviation clause 90 (1) which mentioned "Air transport market opening towards air space without limitation rights air transport (open sky) from and to Indonesia for foreign commercial air transport companies was carried out in gradually based on multilateral or bilateral agreement and its implementation through the mechanism that binds the parties". As for the explanation in clause 90 is "in order to face the development of aviation transport rights without borders (open sky policy), bilateral partnership, multilateral, and plurilateral,

principle reciprocal, fairness, and cabotage, aviation alliance, collecting route network (hub) and feeders (spoke), and also retaining the domestic aviation industry, air freight arrangements focused on creating a conducive climate in the field of air transport, with a set of rights and obligations balanced, standards of excellent service, by prioritizing the protection of service users” (Republic of Indonesia, 2009).

The Open Sky agreement is related to the ability of the competitiveness between ASEAN airlines to compete in mastery global market in ASEAN countries. Open Sky is illustrated that the occurrence of the interconnection of all flights from each region of ASEAN countries. With this interconnection, there is cannibalization of airlines, cannibalization means that flight company that is strong and can survive can master the ASEAN market share. For example, years ago the passengers who want to get to Indonesia from Thailand, must use Indonesian airline (Garuda Indonesia) and Indonesia can also fly to Thailand in this case is called back to back. However, the policy in the Open Sky right now is the interconnection routes, for example the airline of Malaysia is carrying Indonesian passengers for the purpose of transporting passengers to Korea. Malaysia airlines are carrying Indonesian passengers, because Indonesian passenger has a more propensity to fly than Malaysian. Therefore, Indonesian airline industry (Garuda Indonesia) should keep their market share passengers both in domestic and international, create a new transit flight and increase passenger traffic both going to or into an ASEAN countries which hopefully could resume flight to Europe and America.

Transport has a key role in the development of economic and non-economic development in Indonesia. Examples of economic development are the increase in national income, the development of national industry, and the maintenance level of employment opportunities for the people of Indonesia. While the development of a non-economically is to increase the integrity of the nation and improve the defense and national security. Therefore, the need for the development and improvement of the quality of transport services (Muhammadiyah & Majid, n.d.).

Here are the positive and negative impacts with the ASEAN Open Skies Policy. The positive impacts are improvement of trade, because it can help the process of import-export, attract foreign investors to open business in Indonesia, and most surely add the progress in the field of tourism. The negative impacts are if Indonesia does not improve the condition of the airlines, then the national aviation company could not compete with other airlines, which make Indonesia's market share will be taken over by the company of another flight.

Therefore, this research aims to review how aviation industry of Indonesia can survive and maximize services to compete in the cannibalism market.

Method

This research used descriptive qualitative as the method by using SWOT analysis. The data sources used were primary data and secondary data. Primary data sources is data that obtained from interview with Mr. Andri Primadi as a lecturer at STMT Trisakti. While secondary data sources obtained from existing sources, like literature that related with information about issues reviewed. Techniques of collection data by library research with reading and reviewing the literature related to the issues reviewed.

Instrumental input of this research is UU No. 1 Year 2009 About Aviation and Ministry of Transport Regulation No. 69 Year 2013 About Tatahan Kbandarudaraan Nasional. Input of this research is how to keep Indonesia maintaining its sustainable transportation In this case is the airline that can be equal with other ASEAN airlines. The subject of this research is airline, while the object of this research is ASEAN Open Skies Policy. Output of this research is Indonesia's airline can survive and compete with other ASEAN airlines.

Discussion and Result

A. Analysis Result of Interview

ASEAN open skies policy is an international agreement between ASEAN countries, both bilateral and multilateral which discusses about aviation sector proposing of creating free market environment. The meaning of free market environment is that every airlines of an ASEAN countries is allowed to compete fairly in the operation of passengers and cargo, price flexibility, and eliminating limits relating to routes, number of airlines allowed to operate, frequency of flights, type of aircraft used, airport managers, ground handling, and air traffic controllers. The objective of ASEAN open sky is remove any form of prohibition airline services between countries in order to advance travel and a growing trading company, a job opportunities with high-quality, and economic growth.

According to Edhie Haryoto, ex Director of Angkasa Pura II, there are fears of sabotage. For example the domestic passengers from Aceh to Makassar can carry the Malaysia Airline or Singapore with connections in Kuala Lumpur or Singapore (Angkasa, January 2015).

As already disclosed in the framework, with the ASEAN Open Sky Policy it can get an opportunities and threats for Indonesia. The opportunity for the Indonesia airline can expand the interconnection routes in region of ASEAN and also can expand the routes to the area of Europe and America. Threat to Indonesia is if the airlines did not have a strategy to deal with strict competition, the company's market share of flights Indonesia will be beaten by other airlines.

From the results of the interviews disclosed by one of the Lecturer STMT Trisakti namely Mr. Andri Primadi about ASEAN Open Skies Policy is as follows:

“Open sky concept actually most primarily not on how each sees weakness, e.g. infrastructure, continue to human resources, but on the side of the policy related to the ability of the competitiveness of existing flights, it's actually from the most correct concepts, like that, so here's the thing, an open sky policy is actually used to describe the interconnection of all

flights that occur from each ASEAN Country region, it is primary. Well, if it's in the context of interconnection by the glasses of airline industry people, is the occurrence of cannibalization of the airline company, its extreme language. Why it is said cannibalization? Upside, called by the airlines who settle that can still survive”.

B. SWOT Analysis

Analysis result in table 1 are: (1) Strategy OS: Garuda Indonesia keep providing consistent services and also keep introducing service concept that is hospitality and uniqueness of Indonesia, in order to get the chance to have the rapid growth of the aviation market to the Asia-Pacific region; (2) Strategy OW: with many weaknesses owned Garuda Indonesia, then Garuda Indonesia should continue to have a strategy to cover weaknesses and be able to take opportunities that exist. The strategy can be the recruitment of qualified employees and provide the best fares to Asia-Pacific routes, so that the community of Indonesia keep using Garuda Indonesia; (3) Strategy TS: Garuda Indonesia has the threat from external, but not to worry because Garuda Indonesia still has power. The existence of power, Garuda Indonesia can solve existing problems on the threat from external, for example develop infrastructure and increase the capacity of international routes; (4) Strategy TW: Garuda Indonesia needs to be careful because of the threat from the external and also has internal weaknesses of the company. The strategy that can be done by Garuda Indonesia to solve this problem is to organize the expense as well to maintain their capital, so that does not offer the high ticket prices.

Table 1. SWOT Analysis of Garuda Indonesia

<div style="text-align: center;"> <div style="transform: rotate(-45deg); display: inline-block;">INTERNAL</div> <div style="transform: rotate(45deg); display: inline-block;">EXTERNAL</div> </div>	STRENGTH	WEAKNESS
	1. The largest airline in Indonesia	1. High operating costs affect to expensive airline ticket prices
	2. There is a visa service on board (Immigration on Board)	2. The limited number of cockpit and cabin crew thus causing flight delay
	3. Service concept that focus on the hospitality of Indonesia called "Garuda Indonesia Experience"	3. High levels of debt
	4. Top 8 airlines in the world (Skytrax) & world's best economy class	4. Depend on automatically system in running a business. If there's a mistake from the system the company's business processes will be uninterrupted
	5. Best cabin crew (Skytrax)	5. The company owns or has fixed the deficit on working capital in the future
OPPORTUNITIES	STRATEGY OS (strengths and opportunities from external, organization can develop)	STRATEGY OW (a big opportunities from exsternal, carefully the weaknesses of internal organization)
1. The reengineered business developing cargo is a big potential for Garuda in the movement of digital sales	1. Keep the consistency of providing services (S1, O5)	1. Recruit the most qualified employee (W2, O3)
2. "Exellent Indonesian Hospitality" service by Garuda to improve customer experience		
3. Indonesia became the largest population among ASEAN	2. Continously introduce the service concept of Garuda Indonesia to the passenger around the wolrd (S3, O4)	2. Provide ticket fare in Asia Pacific routes, to keep Indonesia's passenger to use Garuda Indonesia for traveling to Asia Pacific(W1, O3, O5)
4. Indonesia is one of the rapid growth in aviation market		
5. Fast-growing Asia-Pacific airline industry		
THREATS	STRATEGY TS (threats from external, no need to worry because internal organization over powering)	STRATEGY TW (risky, threats from external and besides in internal organization more weaknesses
1. Domestic political upheaval which led to the main threats that plague Indonesia's economy which have an impact on Garuda	1. Develop the infrastructure of the airport (such as runway) (T5, S4)	1. Managing the cost for maintain their capital (T2, W5)
2. Excess competition relating to the price between the main competitors of Garuda may threaten both yields of the load factors		

Table 1, Cont. SWOT Analysis of Garuda Indonesia

3. Foreign airlines are doing market penetration to Indonesia to compensate for the decrease in international passengers due to the global crisis		
4. An increase in capacity, a decrease in the price of tickets and the growing number of new flight routes opened by another airline	2. Increasing capacity and add more various routes to International flight (T4, S1, S3, S5)	2. Add more resources for the airline industry (T4, W5)
5. The presence of an airport facility factor is a factor that can not be controlled which block the punctuality of flights (On Time Performance/OTP), such as runway/runway limited		

Generally, in the determination of the strategy, if the organizations have a large weaknesses, even though there is an opportunity or a threat, then company need to hold the internal consolidation. Internal consolidation aimed to reaffirm the Organization's weaknesses, such as human resources, infrastructure, funding and more, so that it is capable of facing threats as well as capturing opportunities from external. Whereas, if it happens the organization have a big strength, organizations can make strategy with careful planning, systematic and scalable by leveraging the resource potential of the organization, to move towards the purpose of the organization. This is done in order to suppress the threat from outside, as well as capturing the opportunities that exist.

Top 10 Airlines in the World (Skytrax) & World's Best Economic Class

Table 2. World top airlines & best economy class Skytrax version.

World Best Top 10 Airlines	World Best Economy Class
1. Emirates	1. Garuda Indonesia
2. Qatar Airways	2. Asiana Airlines
3. Singapore Airlines	3. Korean Air
4. All Nippon Airways	4. Singapore Airlines
5. Asiana Airlines	5. Qatar Airways
6. Cathay Pacific Airways	6. Japan Airlines
7. Etihad Airways	7. Oman Air
8. Garuda Indonesia	8. All Nippon Airways
9. Turkish Airlines	9. Thai Airways
10. Qantas Airways	10. Malaysia Airlines

World's Best Cabin Crew

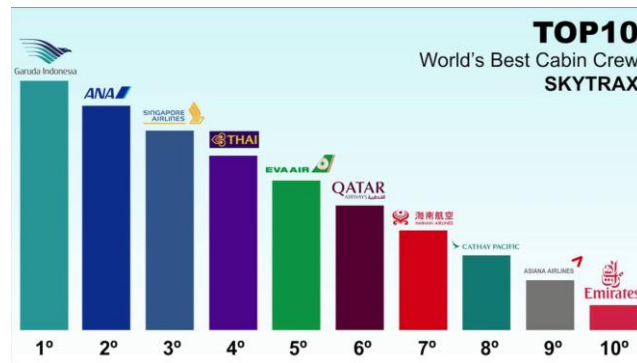


Figure 1: JPEG image of World's best cabin crew Skytrax version.

C. Strategy to Survive for the Sustainable Air Transport

Based on the SWOT Analysis results above, the aviation company of Indonesia (Garuda Indonesia) has one weakness, namely the limited number of cockpit and cabin crew that could cause service operated schedule delay. In addition, aviation company of Indonesia (Garuda Indonesia) also has the opportunity, namely to become Indonesia's biggest population in ASEAN. Therefore, the strategy required is to recruit some populations in Indonesia that has the quality of human resources which means people who have skills. Here is a note about the quality of human resources (skill):

1. Improve mastery of Foreign Language

Related to ASEAN Open Skies Policy as a form of embodiment Economic Community (AEC), every airline will need reliable human resources and undoubtedly human resources of Indonesia get a chance and also challenge to survive and compete in the era of globalization. Communication is the key factor to win in this era. To be able to speak in foreign language is one of the important communication factor to compete.

English First - English Proficiency Index (EF EPI) conducted a research to rank countries that the citizens using English to communicate. The result showed the increasing and decreasing usage of English. This survey took the data from the test results of 750.000 adults, age over 18 years old (Profi, 2014). Here are the result of the survey from 63 countries:

Table 3. Index of English Fluency

VERY HIGH CAPABILITY			INTERMEDIATE CAPABILITY			LOW CAPABILITY			VERY LOW CAPABILITY		
1	Denmark	69.30	19	Republik Ceko	57.42	32	Uni Emirat Arab	51.80	45	Yordania	47.82
2	Belanda	68.99	20	Spainol	57.18	33	Vietnam	51.57	46	Qatar	47.81
3	Swedia	67.80	21	Portugal	56.83	34	Peru	51.66	47	Turki	47.80
4	Finlandia	64.40	22	Slowakia	55.96	35	Ekuador	51.05	48	Thailand	47.79
5	Norwegia	64.33	23	Republik Dominika	53.66	36	Rusia	50.44	49	Sri Lanka	46.37
6	Polandia	64.26	24	Korea Selatan	53.62	37	Tiongkok	50.15	50	Venezuela	46.12
7	Austria	63.21	25	India	53.54	38	Brasil	49.96	51	Guatemala	45.77
HIGH CAPABILITY			26	Jepang	52.88	39	Meksiko	49.83	52	Panama	43.70
8	Estonia	61.39	27	Italia	52.8	40	Uruguay	49.61	53	El Salvador	43.46
9	Belgia	61.21	28	Indonesia	52.74	41	Chili	48.75	54	Kazakhstan	42.97
10	Jerman	60.89	29	Prancis	52.69	42	Kolombia	48.54	55	Maroko	42.43
11	Slovenia	60.60	30	Taiwan	52.56	43	Kosta Rika	48.53	56	Mesir	42.13
12	Malaysia	59.73	31	Hong Kong	52.50	44	Ukraina	48.50	57	Iran	41.83
13	Singapura	59.58							58	Kuwait	41.80
14	Latvia	59.43							59	Arab Saudi	39.48
15	Argentina	59.02							60	Aljazair	38.51
16	Rumania	58.63							61	Kamboja	38.25
17	Hongaria	58.55							62	Libya	38.19
18	Swiss	58.29							63	Irak	38.02

Source: English First - English Proficiency Index (EF EPI), 2014

The Indonesian Government should be prepared to support and facilitate the citizens consequently the citizens are capable to compete in triple-T revolution (Transportation, Travel, and Technology). The professional labors of Indonesia have freedom to compete with foreign labor which will create a strict economic competition. This condition urges Indonesian citizens to be able to communicate in English otherwise they will lose the competition in the free market of AEC (Purwanto, Tinggi, Tristakti, Rafi, & Pongoh, 2016).

2. Improve mastery of Modern Technology Telecommunication

Today, we live in the globalization era known also as modernization era. The modernization is applied in many fields including science and technology. A wave of science technology in different fields such as transport, communications and information has brought many changes in dynamic human lifestyle. Information technology data currently used in a variety of activities, such as social, political, and economics and never related to age, any age can be affected (Mudasiru, 2005).

The stakeholder and shareholder needs to utilize technological development by investing modern technology for transportation modes also the management of information, so that it can be utilized more efficiently (S, n.d.).

3. Indonesia's Airport Infrastructure

The condition of economic growth of the country will make an impact to a condition of air transportation that creates virtuous circle followed by

increasing demand to improve greater growth. With increasing demand of air transportation assumes that capacity & infrastructure airport is adequate and can fulfill needs of many people (Prakarsa, 2012). Every country in the world is interconnected economic, because the world economy continues to move dynamically, whether in the rising conditions or descending conditions and also mutually interact. Currently, international trade has become a world trend, where every country interplay and interact within the supply chain in accordance with the needs of each country in order to penetrate the global market (Lesmini, Purwanto, & Trisakti, 1969).

According to the Directorate General of Air Transportation of the Ministry of Transportation Republic Indonesia data in 2017, currently Indonesia has 297 airports, 28 among them is the international airport. Based on the Regulation of the Ministry of Transportation No. 69 Year 2013 About Tatanan Kebandarudaraan Nasional clause 37 (a) which mentioned “The international airport of entry in the ASEAN open sky agreement namely Soekarno-Hatta International Airport (Jakarta), Juanda International Airport (Surabaya), Kualanamu International Airport (Medan) International Airport, I Gusti Ngurah Rai (Bali), the International Airport and Sultan Hasanuddin (Makassar)” (Perhubungan& Indonesia, 2013).

Those airports are chosen because they have sufficient facilities that support the activities and are located in the area that perform high economic activities. Those five airports also have complete air safety and security. They are also considered to have the largest infrastructure in the quantity of passenger and cargo of air transport, both in domestic or international and cover domestic and international routes.

Besides five airports which already are appointed to meet the open sky policy, other airports in Indonesia also require improvements of air traffic control infrastructure to meet the demand. The improvement of other airports mainly focuses on hub and spoke to bring in more passengers. Collecting Airport (*HUB*), is an airport which has a wide scope of services from several airports serving a large number of passengers and/or cargo

and have an impact on the development of national economy. Collecting airport is divided into three, the scale of primary services by serving passengers of greater or equal to 5,000,000 persons per year, with a secondary service scale serving passengers with an amount greater than or equal to 1,000,000 and less than 5,000,000 persons per year, while on a tertiary service scale that serves passengers with an amount greater than or equal to 500,000 and less than 1,000,000 people per year (Rafi & Rifni, n.d.).

4. Airport Development

With the number of increasing flight schedules and the increasing number of passengers both in domestic and international flights, the current condition of the airline industry infrastructure Indonesia is still in the phase of development. There are 14 new airports which are currently being conducted with the target development, estimated to be completed in 2017. They are:

Table 4. Under Construction Airport

	Airport	City	Built (year)	Target Completion (year)
1	Letung Airport	Anambas (Riau)	2014	2017
2	Maratua Airport	Berau (East Kalimantan)	2014	2017
3	Morowali Airport	Central Sulawesi	2014	2017
4	Tebelian Airport	Sintang (West Kalimantan)	2014	2017
5	Werur Airport	Tambrau (West Papua)	2014	2017
6	Koroway Batu Airport	Boven Digoel (Papua)	2014	2017
7	Namniwel Airport	Buru (Maluku)	2014	2017
8	Samarinda Baru Airport	Samarinda (East Kalimantan)	2014	2018
9	Kabir Airport	Pantar (NTT)	2014	2017
10	Beringin Airport	Muara Teweh (Central Kalimantan)	2010	2018
11	Kertajati International Airport	Majalengka	2013	2018
12	Siau Airport	Sitaro (North Sulawesi)	2014	2019
13	Tambelan Airport	Pekanbaru (Riau)	2014	2019
14	Bentukunik Airport	Toraja	2014	2020

Source: <https://mgt-logistik.com/bandara-baru-indonesia/2017>

In addition, the existence of new airports aims to develop regional economy, improved connectivity, safety, industrial development, tourism, defense and humanitarian security. The industry of air transport is complemented with the tourism. In tourism, it needs transportation mode to bring the visitors into a place, beside the transportation industry related on tourism to deliver the demand for the services. Air transportation directly impacts into the whole level of tourism. The number of growing tourism has caused by the transport. The relationship of the tourism and transport are stimulated. With many modes of transportation, air transport still plays an important in tourism (Ricardianto, Djajaputra, & Martono, 2017).

If Indonesia is not immediately set and build a large modern infrastructure for airports in Indonesia, then port in neighboring countries will be the hub and even can be the entrance gateway to Indonesia.

Conclusion

Air transport industry became the initial sector to fight after the implementation of the ASEAN Economic Community (AEC). One of the agreements in the AEC is the ASEAN Open Sky implementation that opens the air boundaries between countries in the region. The realization of the agreement is the expansive competition that will affect the airline business situation in Indonesia. In air transport industry, the agreement will force the airline company to compete freely domestically and internationally. Those things will certainly improve air transport, economic growth, and the services.

In this context, Indonesia supposed to maintain the market share of the domestic aviation industry, particularly in the airline company Indonesia. How the strategies created by the State as well as the perpetrators of the airlines in respond and observing the global business in the ASEAN Open Sky agreement. It is, in this condition of cannibalization concern for the Countries to maintain and strengthen the quality and quantity of airline conditions in Indonesia.

Refers to a system of sustainable transport concerns towards global market conditions in the ASEAN Open Sky, the entrepreneurs or the

perpetrator of the aviation industry pays attention to the condition of the company either an internal or external factor concerns.

Sustainable air transport in airline business development includes complex operations in which various systems of economy, social, and environment needs to interact efficiently, not only in the environment of the airline itself, but also with the community surround it. Sustainable airtransport in airline development needs to be supported with a balanced strategy.

References

Journal

- Lesmini, L., Purwanto, B., & Trisakti, S. (1969). Ekonomi Maritim & Sumber Daya Manusia Indonesia, 372–389.
- Muhammadiyah, U., & Majid, S. A. (n.d.). Formulasi Kebijakan Sistem Policy Formulation of Sea, 3(2), 161–183.
- Perhubungan, M., & Indonesia, R. (2013). Peraturan Menteri Perhubungan Nomor : PM69 Tahun 2013.
- Prakarsa. (2012). Transportasi Udara. *Jurnal Prakarsa Infrastruktur Indonesia*, (Januari 2012), 33.
- Profi, E. F. E. (2014). Ef epi.
- Purwanto, B., Tinggi, S., Tristakti, M. T., Rafi, S., & Pongoh, H. (2016). Sumber Daya Manusia Transportasi, Telekomunikasi, Dan Pariwisata Dalam Perspektif Global Human Resources on Transport, Telecommunication, and Tourism Sectors in Global Perspective, 3(3), 327–338.
- Rafi, S., & Rifni, M. (n.d.). SOFT SYSTEMS METHODOLOGY PADA PENGEMBANGAN BANDAR UDARA PROVINSI SULAWESI BARAT SOFT SYSTEM METHODOLOGY-BASED ON DEVELOPMENT OF AIRPORT OF WEST SULAWESI, 4(2), 159–176.
- Republic of Indonesia. (2009). Aviation Law. <https://doi.org/10.1017/CBO9781107415324.004>
- Ricardianto, I. P., Djajaputra, D. G., & Martono, P. D. (2017). Air Transport And Tourism In Indonesia. *IOSR Journal Of Applied Chemistry*, 10(5), 01–19. <https://doi.org/10.9790/5736-1005010119>
- S, T. I. H. (N.D.). Multimoda Dalam Mewujudkan Visi Logistik Indonesia 2025, 69–84.

Website

- Direktorat Jenderal Perhubungan Udara Kementrian Perhubungan Republik Indonesia. (2017, November 2nd). *Bandara*. Retrieved November

- 16th, 2017, from
<http://hubud.dephub.go.id/?id=bandara/index/filter:category,0>
- Aditya, I. (2016, November 17). *Masyarakat ASEAN : Harapan dan Kekhawatiran*. Retrieved October 23, 2017, from <http://krjogja.com/web/news/read/15953/i>
- Hidayati, R. (2017, November 14). *Sumber Daya Manusia Berkualitas Sebagai Kunci Daya Saing Indonesia Menghadapi ASEAN Economic Community*. Retrieved October 23, 2017, from <http://www.kemendag.go.id/pusdiklat/news/wawasan/11>
- Panca, A. (2016, Juni 29). *Pengertian dan Jenis Infrastruktur*. Retrieved November 10, 2017, from <http://any.web.id/pengertian-dan-jenis-infrastruktur.info>
- Putradi, C. (n.d.). *Bandara Baru Indonesia*. Retrieved October 24, 2017, from <https://mgt-logistik.com/bandara-baru-indonesia/>
- Sari, N. (2015, March 2). *Kemampuan Bahasa Inggris Orang Indonesia Tergolong Rata-Rata*. Retrieved October 23, 2017, from <http://marketeers.com/kemampuan-bahasa-inggris-orang-indonesia-tergolong-rata-rata/>
- Wahyuni, S. (2015). *Perkembangan Teknologi di Indonesia*. Retrieved October 24, 2017, from <https://sriwahyuni2016.wordpress.com/2016/02/13/perkembangan-teknologi-di-indonesia/amp/>