

STRATEGY FORMULATION FOR RAILWAY CONTAINER TRANSPORT OF PT.KALOG

Audya Anindhita
School of Business and Management
Institute Technology Bandung, Indonesia
audya@sbm-itb.ac.id

Abstract - Indonesia has a huge potential of logistics market. However, the performance of logistics in Indonesia is still lagging behind other countries. One of the factor is because of the dependency on trucking modes. PT.KALOG is a subsidiary of PT.KAI which is a railway freight logistics company that has an important role to help streamline the national logistics and help to reduce the utilization of truck. The logistic industry also become more tight with the emergence of the other railway operator. This research aim to formulate the strategy for PT.KALOG to improve its performance in order to become excel in this competition and make the logistic in Indonesia more effective.

Keywords - Strategic Management, Strategy Formulation, Environmental Scanning, Railway Container Transport, Logistics

Introduction

The demand for distribution, retail or goods will be a huge market for the logistics sector in Indonesia since this country is an archipelago with a wide geographical condition with a population of over 250 million people. Logistic performance index 2014 also noted, Indonesia was ranked 5th in ASEAN, under Singapore, Malaysia, Thailand, and Vietnam. This is due to inadequate logistic transportation condition that still need to be addressed. Besides the uneven distribution and infrastructure problem, the other factor that causing inadequate logistic transportation condition in Indonesia is because of the dependent on trucking mode which in some condition, make the distribution of goods inefficient and ineffective. The dependent on trucking mode also cause another problems such as the increasing of traffic, pollution, and also the burden of the road.

PT.KALOG is a subsidiary of PT.KAI which is a railway freight logistics company that has an important role to help streamline the national logistics and help to reduce the utilization of truck. Even though PT.KALOG has reached their target in 2014, they are still dissatisfied because actually PT.KALOG can take opportunity that is much more than what has been obtained. The emergence of the other railway operator make the competition in this industry become more tight. Therefore PT.KALOG need to improve their performance in order to excel in this competition and to assist the effectiveness of logistic in Indonesia. The purpose of this research is formulating the strategy for PT.KALOG in order to improve its performance by increasing the public demand of them.

Literature Review

Environmental Scanning

According to Wheelen and Hunger (2012), strategic management is a set of managerial decisions and actions, which determine the long-run performance of a corporation. It consists of environmental scanning (external and internal), strategy formulation, strategy implementation, evaluation and control.

To analyzing the external factor, the tools that will be used are general environmental analysis, Porter's five forces analysis, and competitor analysis. General environmental analysis will be used to know the factor that affect the societal environment of PT. KALOG based on demographic, politic, economy, sociocultural, technology, global, and physical issues. Porter's five forces help the researcher to know where the power lies in the business situation by analyzing threat of new entrants, threat of substitute products, bargaining of suppliers, bargaining of buyers, and the competitive rivalry. Competitor analysis is used to compare some important variable between PT. KALOG and its competitor.

The internal factors that will be analyzed are the tangible resources and intangible resources, value chain using value chain analysis, customer's perception of KALOG service based on RATER and VRIO framework. The value chain analysis is to identify the primary and support activities that add value to PT. KALOG and analyze the activities, which become strength or weakness. VRIO framework used to analyze four attributes that KALOG's resources must possess in order to become a source of sustained competitive advantage

Strategy Formulation

Strategy formulation consists of corporate strategy, business strategy, and functional strategy. The tools that will be used in corporate strategy is grand matrix strategy to reveal the condition of PT. KALOG and determined what kind of strategy that will be conducted by analyzing IFAS and EFAS table first, that will help to know the external and internal factors: strength, weakness, opportunity, and threats that will be consideration of the strategy. Business strategy is to improve the competitive position to increase the competitive advantage of PT. KALOG in logistic industry. This tool is used to determine which level business strategies is suit for PT.KALOG based on based on five level business strategies: cost leadership, differentiation, focus cost leadership, focus differentiation, and integrated leadership/differentiation.

Functional strategy that conducted through the TOWS matrix first. It will help to determine strategic alternatives by examining external opportunities and threats and how they compare to PT. KALOG's existing strengths and weakness. There will be 4 area that need to be filled: SO (maxi – maxi strategy) by combining the strengths and opportunities, ST (maxi – mini strategy) by combining the strengths and threats, WO (mini-maxi strategy) by combining the weaknesses and opportunities, and WT (mini-mini strategy) by combining the weaknesses and threats. Functional strategy consist of marketing strategy, operational strategy, research & development strategy, information technology strategy, human resources strategy, and financial strategy.

Methodology

Problem Identification

This step is to analyze the current condition of PT. KALOG and also the industry in order to identify the problem that need to be solved in this research.

Theoretical Foundation

The next step is to collecting the theories from experts which will be used as a foundation and guide for the tools in this research. The tools will help to find the solution of the problem. The theories gathered from some books:

Strategic Management (Hitt, Ireland, & Hoskisson, 2011)

Strategic Management and Business Policy (Wheelen & Hunger, 2012)

Data Collection

This step is to gathering data that needed to be analyzed. There are two types of data: primary data which collected by depth interview and secondary data which gathered from annual report of PT.

KALOG, Internet, article, journal and another data from PT. KALOG that may be needed over the researcher.

External & Internal Analysis

After collecting data, the next step is to analyze the external factors which will be used general environmental analysis, Porter's five forces analysis, competitor analysis, also internal factors which will be used resources analysis, value chain analysis, customer perception of KALOG's service using RATER, and VRIO framework. This will help to determine the strategy that suit with the current condition of PT. KALOG.

Strategy Formulation

This is a step to determine the strategy that suitable with the current condition of PT. KALOG, which can be implemented later. The strategies that used in this research are corporate strategy, business strategy, and functional strategy. The tools that will be used in corporate strategy is grand matrix strategy that will be conducted by analyzing IFAS and EFAS table first. The tools that will be used in business strategy is five business level strategies. Functional strategy that conducted through the TOWS matrix first.

Conclusion & Recommendation

Conclusion explain about the core of the result from this research. Recommendation is to give ideas on how to improve the performance of PT. KALOG in order to increase its role in logistic industry based on the research.

Data Analysis

Environmental Scanning

External Analysis

4.1.1.1 General Environmental Scanning

Demographic

With the large number of population and industrial plants, then the consumption and distribution rate in Java become high. The huge market of distribution volume or activities will be an opportunity for KALOG to take greater market in Java.

However, the constraint is, there is an unequal occupancy between the distribution from the west (Jakarta) and the distribution from the east (Surabaya) due to the number of industry in each area. This condition will make the utilization of railway freight not optimal. There also some commodities belonging to in Surabaya which still can not be transported because they require container that can transport frozen foods.

Economic

Economic factor that directly impact KALOG is the government decision on raising the price of gasoline, which causes the services freight rates by KALOG also rise. The bad economic condition in Indonesia due to the strengthening of US economy affect the decreasing of production by manufacture and less of product absorption on the market. The other constraint in current condition is the unstable new government condition after the president election on 2014 and APBN (Anggaran Pendapatan Belanja Negara) or state budget that has not been issued by government that cause some companies hold their expenditure. This Indonesian economic condition in the last few months affect on the reduction on demand of distribution. The demand of distribution relies heavily on the Indonesian economic condition, therefore these constraints due to the impact of bad economic condition is expected to recover soon.

Political

The Government made Law No. 23 Year 2007, amending the Law No. 13 Year 1992 regarding Railway. This regulation supports the presence of competition between railway freight operators.

Government has made JBI or "Jumlah Berat yang diizinkan", a regulation that give limitation for the capacity of trucking. However, there has been a fraud that eventually harms KALOG because of the trucking limitation capacity regulation that does not enforced properly. Many trucks that transporting cargo exceeds its capacity. It is an injustice condition for KALOG and the other logistics railway operator. KALOG transport cost become not competitive because with this fraud, trucking can give cheaper transport cost and customers eventually choose to use trucking mode instead of railway.

Sociocultural

Indonesian society has a high level of consumption. Research team of PT. Daewoo Securities Indonesia said that during the last 5 years, 56% of the total expenditure in Indonesia comes from personal consumption (market.bisnis.com, 2015). The demand of society consumption will affect the demand of distribution also.

Technological

Technological advances such as double track in the north path of Java, which has been used, and now, government is also developing the double track in the south path of Java. This will become a good opportunity for KALOG to speed up the delivery time of distribution and take greater market. Development of IT also gives positive contributions for KALOG.

Global

The presence of AFTA (ASEAN Free Trade Area) in 2015 also becomes a considerable opportunity for KALOG to take greater market not only in domestic, but also international sector.

Industry Environmental Analysis

Threat of New Entrant

KALOG has new threat of new entrants due to the number of new entrants in this industry which relatively small and it requires substantial investment.

Rivalry among existing firms

Rivalry among existing firms in this industry is high. The competition become stronger because the other railway operator companies have capability to give cheaper price since they don't have a strict mechanism on giving price.

Threat of substitute product

The large number of trucking companies make the threat of substitute product is high because their price is very competitive and more flexible. Trans Jawa tollway that currently develop by government will be a threat for KALOG since this condition will make the trucking modes taking the greater market in land transport.

Bargaining power of supplier

Since KALOG doesn't have their own asset for the means, KALOG has high bargaining power of suppliers. PT.KAI as the main supplier have a significant role in providing the means.

Bargaining power of buyer

The customers are very sensitive to the price. Therefore, KALOG has high bargaining power of buyer because there are many competitors, which can give cheaper price to the customers.

Competitor Analysis

The competitors that will be analyzed are direct competitor that is the other railway freight operator and indirect competitor that is the trucking mode. The direct competitor which will be compared is PT. Bumi Wijaya Indorail (BWI). The indirect competitor which will be compared is CV. RAPI.

Objective

All the freight transport companies have an objective to give the best logistics service in Indonesia. As a railway transport company, KALOG and BWI have a purpose to be the best solution on giving

an exclusive service that secure and can transport large capacity. Meanwhile, the trucking has an objective to transport variance volume of commodities from small to large, which is more flexible without the double handling process.

Strategy

There is regulation, which said that if the company can get the distribution volume up to 1500 TEUs, they only pay 50% of the actual price. To taking this opportunity, BWI focus on gaining volume, therefore sometimes they do the dumping price. Dumping price is the situation where the company giving the price below the price charged. Unlike BWI, as a subsidiary of PT.KAI, KALOG has strict mechanism on giving price, therefore the other railway transport operator can be more flexible on lowering their price, even lower than KALOG. This condition make KALOG put their focus on gaining profit. To avoid losses, KALOG make blockspace strategy. It's a strategy which giving the contract of 1 series of railway or several containers to their customers. As a matter of fact, trucking can lowering their price in circumstance situations because sometimes they do not gain the profit but they find the customers for only recover their cost of gasoline for the destination back from Jakarta to Surabaya. One of the main factor which make the trucking is very competitive is because sometimes they transport volume exceed their actual capacity.

Assumptions

All the freight transport companies have an assumption that there are huge of logistic market especially in Java. With the logistic growth and the increasing in the service industry, there will be a potential market that they can be take each year.

Capabilities

Accessibility

KALOG and BWI as a railway operator, have a weakness on their accessibility to the "end user". Railway just has an access for station to station which mostly in urban area because railway station is located in the center of the city. Meanwhile since trucking have a flexibility path, they have fully access to transport cargo to the end user in another area like suburban or rural.

Process

For the haulage of door to door services, railway needs several operational process or can be said that it require a double handling process since they just have an access from station to station. Meanwhile, trucking can move directly to the "end user" and don't require a double handling process. Compare to trucking, railway has an advantage on security, it is free from the threat of extortion and be spared from traffic. However, railway can be very slower than trucking if the handling after station-to-station process not performed well by the operator.

Coverage Area

Since most of the industrial areas are located in Jakarta and Surabaya, both KALOG and BKE have coverage area in Jakarta and Surabaya, which utilize the north path railway. KALOG also have delivery area to Bandung. Meanwhile, with its flexibility, RAPI can coverage all area in Java. They also have several checkpoint along Pantai Utara Jawa lane thus allowing the driver to take a rest.

Cost

In some circumstance situation, BWI has relatively lower price than KALOG because they don't have strict mechanism on lowering the price. Trucking modes have a very competitive price than the railway transport. The price is relatively 10-20% lower than the railway transport. This also due to the process of trucking that don't need a double handling process on their operational. The competitive price is also supported by the subsidy on their fuel, unlike the railway transport that do not get the subsidy from the government.

Capacity

KALOG and BWI have the same type of container that is dry container with the same capability, but KALOG provide more series of railway than BWI. Railway will be efficient on haul a large commodity because of its capability of on transporting large capacity. RAPI has several size of containers with the wing box & closed box types, therefore small commodity is more suitable to transport with trucking mode.

Internal Environmental Analysis

Resource Analysis

Tangible Resources

Financial Resources

As a parent company, PT.KAI has become a major shareholder, which contributed 99.9% of shares. Until today, PT.KAI has no plans to conduct an IPO or initial public offering.

Physical Resources

The physical resource that still need to be developed is the container yard in SAO because some of the emplacement is still broken, and the emplacement for lo/lo activity in Kalimas and SAO is still not enough for 30 flat deck. KALOG has advantage of rail track access that directly enter the port of Tanjung Perak which can transport the import commodity and also Tanjung Priok that still in develop.

Technological Resources

Currently KALOG has implemented Corporate Knowledge Management (KCKM), an application that have a function for sharing knowledge about director's decision, regulation, or anything that related to the company's development. The other technology that KALOG has implemented is Human Resources Information System (HRIS), an application about database of employee's data.

Organizational Resources

KALOG has constraint in an approval of decision that takes a long time due to the absence of directors which is needed for important decision making. In organizational, human resource division of KALOG always controlling their employee that can be seen from their attendance list and also their performance. Employee can get promoted, demotion, or even mutation based on their performance. Besides KCKM, KALOG also spread information to their employees through email.

Intangible Resources

Innovation Resources

As the subsidiary of PT. KAI, KALOG has a good access and coordination on developing their business. Therefore, actually KALOG has a capability to innovate their service,

Reputational Resources

The other advantages of being a subsidiary of PT.KAI are they have a good reputation of trustworthiness.

Human resources

KALOG has human resource that well capable in the operational of railway. However there isn't a professional in the board of director that have experience in railway logistic sector.

Value Chain Analysis

Support Activities

Firm Infrastructure

To serves company's needs and ties its various parts, KALOG has some departments such as internal control & quality assurance, corporate planning & business development, infrastructure, accounting & finance, corporate services, marketing, operation, and security.

Human Resource Management

In order to have well manpower or human resources, KALOG always selecting their employee by recruiting and hiring process with an improvement on the system and procedure.

Technology Development

KALOG is developing the SAP (System Applications Product), a part of ERP, system that support the company in carrying out its activity more efficiently and effectively

Procurement

KALOG has selective system on selecting vendor. With the strict control and requirement, KALOG often blacklist the vendor that does not comply with the requirement.

Primary Activities

Operations

KALOG provides 4 series of railway which consist of KALOG 1, KALOG 2, KALOG 5, and KALOG 6. The operational activity will be conducted after the customers send the shipping instruction. Door-to-door service conduct by several process (double handling). Therefore, it needed a good communication between the executors. Detail controller also needed in each process in order to avoid delays. The slow process of operational usually caused by loading/unloading process that still need a long time, operational equipment failure, and also the emplacement damage in CY.

Marketing & Sales

Marketing division tasked to deal directly with the customers. Mr. Subakir as the operation and marketing director said that, as a newly established company for 5 years, KALOG is still need to develop their knowledge about marketing strategy on logistic sector.

Services

Based on the interview with customers about KALOG service, they said that KALOG relative perform the promise service on their timeliness but still need to be improved, they feel that KALOG has a safe service, they agree that KALOG staff has a good knowledge on answering the customer's questions and they always have a respectful manner on providing services, and already inspiring trust and confidence, some of the emplacement need to be repaired, they support the provision of an online tracking system, KALOG less proactive on making an offer compare to other railway freight company, and they said that that KALOG has willingness to help customers and provide prompt service.

VRIO Framework

Based on the analysis, there are three important resources which affecting KALOG including infrastructure, IT, and human resources capabilities. Table 4.1 shows the VRIO framework that used to analyze four attributes that KALOG's resources must possess in order to become a source of sustained competitive advantage. The resources must be rare, valuable, inimitable, and organized to capture value.

Table 4 1 VRIO Framework

Resource attribute	Valuable	Rare	Inimitable	Organize to capture value
Infrastructure	Yes	No	No	Yes
Technology (IT)	Yes	No	No	Yes
Human Resources capabilities	Yes	No	No	Yes

Strategy Formulation Corporate Strategy

EFAS

Table 4.2 EFAS Table

EXTERNAL FACTORS	WEIGHT	RATING	WEIGHTED SCORE	COMMENTS
OPPORTUNITIES				
The presence of APTA	0.1	2.5	0.25	Increase the export import distribution
Huge population and industrial area in Java	0.15	4	0.6	KALOG always have opportunity to take greater market in Java
Railway technology development	0.15	4	0.6	Make the service more efficient and effective especially for the double track development in south path of Java
High public demand of consumer goods	0.15	3	0.45	Increase the demand of distribution
THREATS				
Unequal occupancy	0.05	-2.5	-0.125	The utilization of railway become not optimum
Demand distribution relies on the Indonesian economic condition	0.15	-3.5	-0.525	Bad economic condition could decreasing the demand of distribution
High threat of substitute product	0.15	-4	-0.6	Truck have capability to take the same market with lower price
Trans Jawa tollway project	0.1	-3	-0.3	Opportunity for trucking mode in taking greater market
TOTAL SCORES	1		0.35	

The total score of measurement of EFAS is 0.35. It can be concluded that the company opportunity factors have bigger affect than the threats factor. Therefore, KALOG should utilize every opportunity to grow as a business.

IFAS

Table 4.3 IFAS Table

INTERNAL FACTORS	WEIGHT	RATING	WEIGHTED SCORE	COMMENTS
STRENGTHS				
Good access to PT.KAI	0.2	3.5	0.7	As a subsidiary, KALOG have good capability to develop their business
Good reputation	0.05	2	0.1	Good reputation of PT.KAI affect the image of KALOG
Have safety service with maximum capacity	0.1	3	0.3	Safety service is one of important the concern for customers also become an advantage for KALOG if compare to trucking modes
Have a good capability and knowledge about railway	0.05	2	0.1	The employee have well experience in railway operational
Have access to directly enter the port	0.1	2	0.2	KALOG can take import market and help to reduce the utilization of trucking at port
WEAKNESS				
Price that relatively high	0.1	-3	-0.3	Price is one of the main consideration of customer's decision
Inadequate infrastructure	0.2	-4	-0.8	An adequate infrastructure is the main of the concern on gaining the competitive advantage
Double handling process in door to door service	0.1	-2	-0.2	Require more cost and needs detail controller
No BOD who have background on logistic sector	0.05	-2	-0.1	Well experience of this industry is important to compete with the existing firm who have involve in logistic sector long before KALOG
IT which still not rare and imitable	0.05	-2	-0.1	Rare and inimitable IT required for sustainable competitive advantage
TOTAL SCORES	1		-0.1	

The total score of measurement of IFAS is -0.1. It can be concluded that the company weakness is bigger than the strength. Therefore, KALOG should develop their internal capability to increase their strength and overcome their weakness.

Grand Matrix Strategy

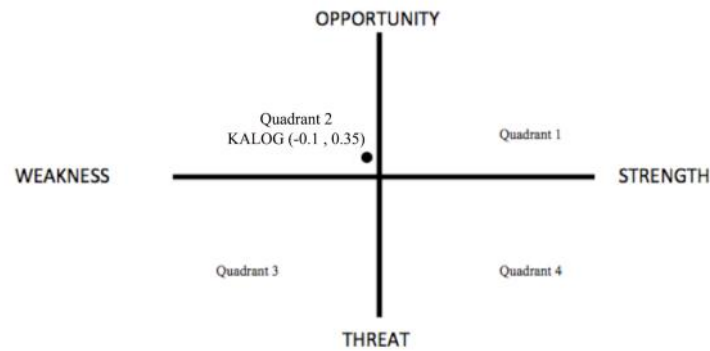


Table 4 4 Grand Matrix Strategy

Based on grand matrix strategy, the position of KALOG is on quadrant 2, which is "Stability" where the x coordination falls in -0.1, and the y coordination fall in 0.35. Therefore, KALOG should repair its capability first by improving their internal performance so that this company can take the existing opportunity.

Business Strategy

Porter Competitive Strategy

Based on the business strategy, the most suitable strategy for KALOG is, Focus Differentiation which means that KALOG should focus on its narrow target market, which is large commodity that needs a different and specific services. Therefore, KALOG need to increase their competitive advantage and innovation so that KALOG can provide services that cannot be given by its competitor, especially by trucking as its indirect and also major competitor.

Functional Strategy

Marketing Strategy

KALOG need to always identify and be sensitive to the new potential market.

Increase the market awareness of KALOG existence by open a booth in logistics exhibition.

In making an offer, KALOG have to introduce their advantages.

Giving more attentions to their existing customers, by being proactive on making an offer and ask them if they have any problem with KALOG services.

Operational Strategy

Make service level agreement in each process of operational and also key performance index to control every process.

Provide the open side container, which will help the operational activity more effective.

Information Technology Strategy

Implement the RFID system for tracking online system and automatic sensor for every incoming and outgoing truck that carrying container.

Make an online system approval.

Research and Development Strategy

Doing research and development of frozen commodity.

Develop container for motorcycle commodity.

Adapting a hump yard to face the busy loading/unloading activity.

Accelerate the construction of existing infrastructure.

Human Resources Strategy

Make an evaluation team.

Hiring professional as a director of marketing.

Financial Strategy

Expand the direct customers because they can give more profitable net income than indirect customers, which is 20%.

Make a cost efficiency by reducing unimportant activity.

Negotiate with government to obtain fuel subsidy.

Select customers who have good track records of payment.

Streamline loan interest expense by avoid loan long before the project begins.

Conclusion & Recommendation

Conclusion

KALOG has several opportunies, threats, strength, and weakness. Based on the analysis KALOG weakness is bigger than its strength while the opportunities is bigger than the threats. KALOG should focus in its narrow target market which require an exclusive service. KALOG should conduct strategies to expand the market, make the operational activities more efficient, gain maximum profit, develop human resources, IT, and innovation.

Recommendation

In order to have a sustainable competitive advantage, KALOG must excel on their important primary resources which affecting them including adequate infrastructure, good IT development, and well human resource capabilities. There are also external factors, which if it carried out, will support the development of KALOG such as initial public offering (IPO) and government support. All of these resources and external factors must be integrated that will make this service efficient, added value, reliable, and integrated in order to achieve the objective of this company existence, to be an excellent total logistic solution in Indonesia.

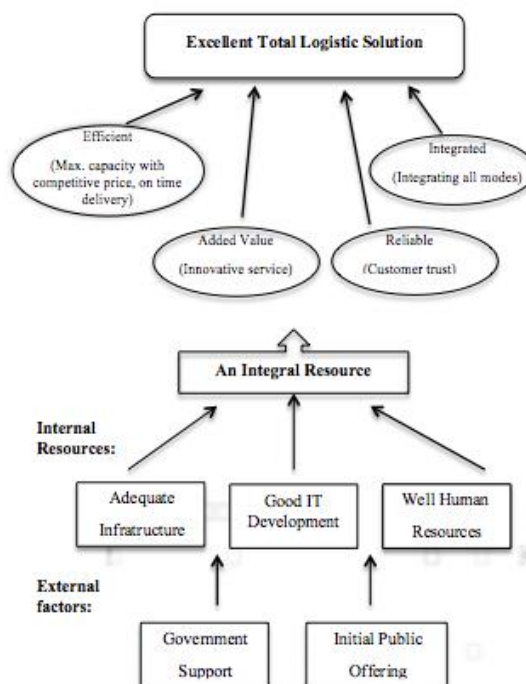


Figure 5.1 KALOG's Strategy in General

References

- Biro Riset LM FEUI.(n.d) Analisis Angkutan Kereta Api dan Implikasinya pada BUMN Perkeretaapian Indonesia. Lembaga Management Fakultas Ekonomi Universitas Indonesia. Retrieved July 2nd 2015 from <http://lmfeui.com/data/Analisis%20Industri%20KA.pdf>
- Chen, I., Brian, K. (n.d) Implement RFID in Railroad Industry from Collaborative Transportation Management (CTM) View. Retrieved August 1st 2015 from http://www.trforum.org/forum/downloads/2009_14_ImplementRFID_paper.pdf
- CV RAPI, (n.d). *RAPI*. Retrieved June 21st 2015 from <http://www.rapi.co.id/about>
- Fitri, N. (n.d) Model Matematika Proyeksi Jumlah Penduduk di Pulau Jawa. Academia. Retrieved June 15th 2015 from https://www.academia.edu/8526775/Proyeksi_Jumlah_Penduduk_di_Pulau_Jawa
- Foodreview. (n.d) *Industri Perikanan Indonesia Menjawab Tantangan 2015*. Retrieved from July 23rd 2015 from <http://www.foodreview.co.id/login/preview.php?view&id=56014>
- Gordon, J.R.M., Lee, P.M., Lucas, H.C.(2004) A Resource-Based View of Competitive Advantage at the Port of Singapore. *Elsevier*.
- Hitt, M. A, Ireland, R. D., & Hoskisson, R. E. (2011). *Strategic Management: Competitiveness & Globalization* (9th ed.). Mason: South-Western Cengage Learning.
- Huang, M., Farhoomad, A. (2008) Citibank's E-Business Strategy for Global Corporate Banking. *The Asia Case Research Centre, The University of Hong Kong*.
- Indian Railway Employee, (n.d). *Marshalling Yards*. Retrieved July 28th 2015 from <http://indianrailwayemployee.com/content/marshalling-yards>
- Liliyah, A. (2014, October 20). Tahun 2015 Ekonomi Indonesia Hadapi Tantangan Berat. *SWA*. Retrieved June 11th 2015 from <http://swa.co.id/business-research/tahun-2015-ekonomi-indonesia-hadapi-tantangan-berat>
- NAMPA Indonesia. (n.d) *NAMPA Indonesia*. Retrieved July 2nd 2015 from <http://www.nampa-ind.com/index.php/daftar-anggota>
- PT Kereta Api Logistik Tbk. (2013). *2013 Annual Report*.
- PT Surabaya Industrial Estate Rungkut, (n.d). *SIER – PIER*. Retrieved June 21st 2015 from <http://www.sier-pier.com/p/tentang-sier.html>
- PT. Bumi Wijaya Indorail, (n.d). *BWI*. Retrieved June 21st 2015 from <http://bumiwijaya.co.id/cgi-sys/suspendedpage.cgi>
- PT. Dharmala RSEA Industrial Estate. (n.d). *Ngoro Industrial Park*. Retrieved June 20th 2015 from <http://www.ngoroindustrialpark.com/>
- Rachmawati, F. (2014, December 2). KERETA API: Kadin Berharap Operator Tidak Hanya Plat Merah. *Bisnis Indonesia*. Retrieved June 16th 2015 from <http://industri.bisnis.com/read/20141202/98/379032/kereta-api-kadin-berharap-operator-tidak-hanya-plat-merah>
- Swasty, W., Hamsal, M., & Simatupang, T. (2014). Business Model Development for Freight Railway Company. *Academia*. Retrieved June 10th 2015 from https://www.academia.edu/9805875/Business_Model_Development_of_Freight_Railway
- The Habibie Center. (2014). Removing Infrastructure Bottlenecks to Increase Indonesia's Competitiveness towards the ASEAN Economic Community. *ASEAN briefs*. 2. Retrieved june 10th 2015 from http://admin.thcasean.org/assets/uploads/file/2014/12/ASEAN_PB_2_Vol.2.pdf
- Wheelen, T. L., & Hunger, J. D. (2012). *Strategic Management and Business Policy Toward Global Sustainability* (13th ed). New Jersey: Pearson.
- Yogatama, B.K (2015, February 16). 72% Kawasan Industri Ada di Pulau Jawa. *Kontan*. Retrieved June 16th 2015 from <http://industri.kontan.co.id/news/72-kawasan-industri-ada-di-pulau-jawa>