
Partnership Strategy Model in Developing Renewable Power Plant: Case Study in Indonesia

Submitted 8/12/18, 1st revision 14/1/19, 2nd revision 23/2/19, accepted 22/3/19

Dewi Mustikaningsih¹, Ina Primiana², Sucherly³, Erie Febrian⁴

Abstract:

Purpose: This research was carried out as an effort to encourage performance improvement of renewable energy industry development in Indonesia and effort needs to be supported by development of optimal partnership strategies through dynamic capabilities, supply chain performance and right regulations. The purpose of this study was to determine the effect of partnership strategy of renewable energy companies in creating a better business performance in Indonesia.

Design/Methodology/Approach: This research is based on data collection and testing of renewable power plant company models and test data using partial least square equipped with various supporting data obtained from government institutions.

Findings: Dynamic capability with average value, supply chain performance and overall regulations have been determined with conditions that are not optimal in all variables studied so that they influence implementation of partnership strategy.

Practical Implications: In optimal conditions it is expected that power plant industry is able to provide sustainable electricity supply in line with ever-increasing demand, expand electrification reach to remote villages, able to transform use of primary energy sources from fossils to environmentally friendly renewable energy where potential is widely spread throughout region.

Originality/Value: The study is expected to be reference for further research relating to development of partnership strategy model in improving business performance that is influenced by dynamic capability, supply chain performance and regulation framework.

Keywords: Partnership strategy, business performance, supply chain performance, dynamic capability, regulation.

Parer type: Research article.

¹Doctoral Student in Business Management Padjadjaran University, Indonesia, e-mail: dewimustika1004@yahoo.com

²Lecturer in Business Management Padjadjaran University, Indonesia, e-mail: ina.primiana@unpad.ac.id

³Lecturer in Business Management Padjadjaran University, Indonesia, e-mail: sucherly@yahoo.com

⁴Lecturer in Business Management Padjadjaran University, Indonesia, e-mail: erie_febrian@fe.unpad.ac.id

1. Introduction

Reliable availability of energy can guarantee economic growth and industrial competitiveness. The higher economic development, the greater the energy needs that have an impact on improving people's welfare. Departement of energy and mineral resources in 2018 stated that Indonesian government seeks to ensure energy security for all communities through the national energy policy with the 4A approach, namely availability, accessibility, acceptability, and affordability. Energy is no longer seen as a commodity but as a critical driver of economic growth. Sources economical and environmentally friendly primary energy is attempted to be able to replace fossil energy, and even nuclear must be included in the national electricity system (Kurtubi, 2018).

Indonesia faces challenges in the energy sector as well as in other countries in the world. Along with increasing energy needs, national oil surplus began to decrease since 1998. This condition eventually led Indonesia to become a net importer of oil in 2004 (ESDM - Ministry of Energy and Mineral Resources, 2018). High of Indonesia's dependence on fossil energy causes national energy security to be vulnerable because of the high gap between supply and demand for fossil energy. In addition to the scarcity factor of fossil energy, environmental issues also contribute to the development of alternative energy. Some of these conditions further encourage the efforts of conservation, diversification and energy efficiency in the development of new environmentally friendly and sustainable energy sources to replace increasingly scarce fossil energy.

Many parties question the readiness of the electricity industry together with government, the private sector, and the public to respond to challenges of the energy crisis that is in sight. Is Indonesia able to meet national energy needs independently by looking at current conditions where energy mix from renewable energy as a substitute for fossil energy that will run out is still so low? Indonesia has the potential for significant, diverse renewable energy resources in various regions. The potential for most renewable energy resources is hydropower 75,091 MW followed by 41,012 MW of marine heat energy and 32,654 MW of biomass. The 12% contribution of renewable energy from the overall energy supply is still minimal. The empirical reality shows that energy policy in Indonesia to create an energy mix has not been able to stimulate investors to invest in renewable power generation industry. Investors still consider development in the renewable energy sector to be unprofitable and at high risk so that various drivers, regulations that foster an investment climate, incentive system and investment security guarantees are needed to excite investors (Lyasnikov *et al.*, 2017).

Is Indonesia able to meet national energy needs independently by looking at current conditions where energy mix from renewable energy as a substitute for fossil energy that will run out is still so low? Indonesia has the potential for significant, diverse renewable energy resources in various regions. The potential for most renewable

energy resources is hydropower 75,091 MW followed by 41,012 MW of marine heat energy and 32,654 MW of biomass. The 12% contribution of renewable energy from the overall energy supply is still minimal. The empirical reality shows that energy policy in Indonesia to create an energy mix has not been able to stimulate investors to invest in renewable power generation industry. Investors still consider development in the renewable energy sector to be unprofitable and at high risk so that various drivers, regulations that foster an investment climate, incentive system and investment security guarantees are needed to excite investors.

Regulations play a significant role due to the character of energy industry which is partially monopolized by government, high risks, long term and high capital so that it requires certainty in investing, incentives, electricity pricing as the domain of government decisions and interest, tax and other subsidies. In this industry, the government acts as regulator and business actor through PT PLN (Persero) and its subsidiaries such as Indonesia Power and Pembangkit Jawa Bali (PJB). State Electricity Company (abbreviated as PLN) is a BUMN that takes care of all aspects of electricity in Indonesia. State-owned enterprises (BUMN) are companies that are fully owned, mostly, or a small part by the government and the government gives control of them. While internal factors are in the form of industry efforts in facing challenges faced in improving performance and maintaining business continuity. Internal factors include measurement of indicators of dynamic capability, supply chain performance, and partnership strategies.

The initial investment phase of the renewable industry still requires supply from other countries, in the form of main machines, experts, capital and technology supplies. The need for these supplies can be provided through a system of cooperation. It is undeniable that early stages of renewable industrial investment are crucial and difficult times so that subsidies and various government facilities are needed within a particular time. After the survival industry in renewable energy generation, there is no component of fuel costs so that these subsidies can be revoked and transferred to new renewable industry.

Supply chains are one most essential parts of sustainable process management. In the production process, the supply chain can be improved, shortened will increase productivity and cut costs. Indonesia's geography, which stretches to 8,514 km and consists of thousands of islands, challenges in fulfilling electricity supply in early days of growing renewable energy industry. Investment is needed in building a power plant where there is still no development infrastructure such as roads, bridges, and ports. At present, 2500 villages have not yet received electricity, located in remote locations that are still not covered by PLN's transmission. The supply chain of fossil power plants makes the cost of distributing electricity and distributing energy to remote areas expensive, making it less efficient. The change in fossil power plants to renewable cuts supply chain because the renewable industry does not require a supply of primary energy sources, use natural potential according to local wisdom and can be placed close to end consumers. Supply chain pruning is not

only in the supply of primary energy sources as fuel for electricity generation but also in reducing transmission of electrical energy from plants to end consumers because the renewable industry is built in areas where potential is sourced.

Since 2011, the government has begun to show concern for the development of new and renewable energy with the enactment of government policies regarding energy mix of various existing primary energy. However, the achievement of the energy mix is still below the target. In 2006-2025 National Energy Management blueprint, the role of renewable can convert primary fossil energy by 23% (Ristek-Dikti – Ministry of Research, Technology and Higher Education, 2016). The target set by the government is still shallow when compared to the potential of new and renewable energy sources in Indonesia that are quite high. However, the energy mix target is also not easy in its implementation because it requires commitment and consistency of government as a regulator. Renewable industry mix project until 2025 reaches 45 GW or project value of 1200–1600 trillion rupiah.

Increased production capacity is needed but transforming fossil energy into renewable energy is even more critical as the driving factor for improved performance. Ability to change capabilities with innovative breakthroughs, in new primary energy sources, new business models, supply chain cuts and ways of innovative capital is urgently needed. Improving the dynamic capabilities of this industry plays a vital role in meeting energy needs so that Indonesia can be released from dependence on other countries. This is in line with the world trend which has taken renewable research and development seriously.

The electricity industry is a complicated business entity and requires the support and cooperation of all stakeholders. To improve industrial performance, it is necessary to have the same vision, perspective, commitment and consistency of stakeholders, which is one pillars partnership strategy which is a reference for stakeholders in carrying out their roles as regulators and business people. Our stakeholders can respond in a fast business environment. At present stakeholders are still running according to their respective and have not yet created synergy, coordination, integration and good cooperation. The supply chain that should be able to improve the value chain has not functioned effectively and optimally. One of the keys to success is conducting programs that have been launched in stages and are consistent and collaborating in an integrated manner. Government prepares a conducive investment climate and has an impact on improving market mechanisms to create a free market mechanism that moves investors in developing. Also, the government must cut regulations that are too long, overlapping and add regulations that have driving force for investors in easy loans, interest subsidies, tax holidays and carbon subsidies. Implement regulations that provide a sense of security and certainty to invest and support private suppliers and subsidiaries of BUMN to develop together.

Regulatory conditions in development of energy sources still face various obstacles such as inability of electricity industry to capture opportunity of large energy market

with demand that is always increasing through appropriate, fast and not overlapping regulatory products between central and regional governments and between agencies related to energy sector, energy policy is still short and sectoral in nature, there is no legal certainty. Harmony starting from policy setting, legislation to implementation needs to be pursued so that this research is essential as a proposal to overcome the energy crisis in Indonesia in the aspect of strategic management.

2. Theoretical Background

Dynamic capability is defined by Teece *et al.* (1997) as the ability to integrate, build and reconfigure internal and external competencies to overcome rapidly changing the environment. Eisenhardt and Martin (2000) mention dynamic capability as a process by companies to use resources, especially the process of integrating, reconfiguring, acquiring and releasing resources to fit or even create market changes. Griffith and Harvey (2001) see dynamic capability as the creation of combination for resources to be challenging to replicate, including effective coordination between functions within the organization to create competitive advantage. Rindova and Kotha (2001) explained that dynamic capability occurs in two stages, namely microevolution through upgrading management capability of the firm and macroevolution through reconfiguring market competences. Dynamic capability can be seen as a tool that makes it possible to reconfigure existing operational capabilities (Galunic and Eisenhardt, 2001).

Zahra and George (2002) emphasize dynamic capability as a fundamental capability that is change-oriented, which helps companies to redeploy and reconfigure their basic resources to adjust customer needs and competitors' strategies. Zollo and Winter (2002) define dynamic capability as learning, and stable pattern of a group of activities carried out through an organization that systematically produces and modifies its operational routines to increase effectiveness. According to Wang and Ahmed (2007), the dynamic capability is not the only process but is embedded in the process itself. Dynamic capability as corporate behavior orientation to continuously integrate, reconfigure, update and create resources and capabilities and most importantly improve and reconstruct core competencies in responding to changes in the environment to achieve and maintain a competitive advantage. Helfat *et al.* (1997) dynamic capabilities as organizational capacity aimed at utilizing its resources effectively to be able to adopt changes in the business environment. According to Teece *et al.* (2007) dynamic capability can be understood as the ability to feel and shape opportunities and threats, capture opportunities, maintain competitiveness through transfer and reconfiguration of organizational resources. Capability dynamic microfoundations distinct skills, processes, procedures, organizational structures, underlying decision rules and disciplines, sensing, seizing and reconfiguring capacities that are difficult to develop and disseminate at the organizational level.

At the business unit level, Pavlou and Sawy (2011) define Dynamic Capability as a capability that assists business units in developing, modifying and reconfiguring their existing operational capabilities into new capabilities that are more in line with environmental changes. According to Shu-Mei and Pei Shan (2014), the dynamic capability is the company's ability to create and utilize organizational resources to achieve sustainable competitive advantage. The company that wins the game should rely on its ability to create, maintain and renew its competitive advantage base in turbulence environmental conditions.

Supply chain performance is the integration of raw material and service procurement activities, changes in semi-finished goods to final products, and delivery to customers (Heizer and Render, 2014). Supply chain performance includes design, planning, execution, control and monitoring of supply chain activities to create net value, building competitive infrastructure, utilizing logistics throughout the world, synchronizing supply and demand and measuring performance globally (Lokollo, 2012). Supply chain performance is a set of interrelated activities and decisions to integrate suppliers, manufacturing, warehouse, transportation services, retailers, and consumers efficiently (Li, 2007). Supply chain performance as business network starting from the beginning of production to fulfilling the demand for goods and services desired by consumers (Harland, 1996). Supply chain performance refers to the management of entire process production, distribution, and marketing where consumers are faced with products that are by their wishes and producers can produce products with the right amount, quality, time and location (Marimin and Maghfiroh, 2013). Based on research Beamon (1999), the process of selecting the right size of supply chain performance is difficult to determine because of complexity. Three types of performance measures are identified as components needed in each supply chain performance measurement system, and new flexibility measures for supply chain are developed.

Supply chain management results in cost savings and increased strong partner relationships with various parties such as suppliers, distributors, retailers, and customers or end consumers (Liputra *et al.*, 2018). Supply chain performance can improve the efficiency of product distribution through the integration of production processes in the supply chain (Saptana and Yofa, 2016). Supply chain performance indicators include product development, strategic partnerships with suppliers, planning, and control, production, distribution, information quality, customer relationships, and purchases. Application of supply chain performance has a positive and significant effect on competitive advantage (Rahmasari, 2011). Supply chain performance contributes to the delivery value of goods and value of the final product that customer receives so that good relationship can support the effectiveness of supply chain, whereas relationships that do not go well can disrupt the effectiveness of entire supply chain (Janvier and James, 2012). In order to realize an efficient product distribution system, the application of integrated supply chain performance is required (Saptana and Yofa, 2016).

Jimly Asshidiqie (2011) defines regulation as written regulation containing binding legal norms for society in general, stipulated by regulators as well as implementing agencies of laws that obtain legal delegation authority to determine specific regulations according to basic rules of the country. Regulation is defined as a formal legal source in the form of legislation that has several elements, formed by state institutions or authorized officials and binding in general (Khusna and Susilowati, 2015). Regulation is a mechanism that can limit power so that regulations interpret power to be limited and law-based authority. Discrepancies between regulations, rules, and laws cause weak coordination in the process of implementing policy (Firdaus, 2017).

According to Enggarani (2016) that the public considers public services by government to be convoluted with complicated requirements and inflexible regulations. Harmonization of regulations in Indonesia is constrained in general including development planning system that has not yet synergized; there is overlapping of government affairs between levels of government in its implementation, attractive government affairs related to potential income, supervision of regulatory products using selective logging systems (Asmar, 2018). Quality of regulation in almost all fields in Indonesia is currently still low, which is characterized by still overlapping and inconsistencies between laws and regulations, both vertical and horizontal. Some regulations are also still felt excessive, and not all are efficient and effective. The current regulation is meant to balance the trend of globalization and regional spirit in the era of regional autonomy. The government needs to regulate regulations through evaluating all laws and regulations, strengthening the formation of legislation, and creating an integrated database of legislation (Muhlizi, 2017).

Faulkner (1995) defines the partnership strategy as a particular mode of inter-organizational relations in which partners invest substantially in developing long-term collaborative ventures and share orientation. Several other researchers defined partnership strategies, as a collaboration between companies to pursue set of agreed objectives but each company remained independent of contributing and sharing profits sustainably in one or more key strategic areas, for example in the fields of technology and products (Yoshino and Rangan, 1995). Daussauge and Garrette (1995) define partnership strategy as agreement or cooperative association between two or more independent companies, which will manage a particular project, with a specified duration of time, where they will jointly improve their competence. This was formed to enable the partnership to collect resources and coordinate efforts to achieve results that cannot be obtained by acting alone.

The Partnership Strategy can be described as a process in which all partners are willing to change fundamental business practices to reduce duplication and waste of resources and facilitate improved performance (Frankel *et al.*, 1996). Partnership strategy is a temporary and contractual relationship between companies that remain independent, aimed at reducing uncertainty surrounding the realization of strategic

goals for interdependent partners by coordinating or running together one or several activities. Each partner can have a significant influence on alliance management or policy (Douma, 1997). Gulati (1998) stated partnership strategy as a voluntary arrangement between companies that involves the exchange or joint development of products, technology or services. Partnership strategy definitions are agreements between companies that partner to achieve agreed-upon common goals. Partnership strategy is a strategic choice used to achieve their goals, based on collaboration between companies (Mockler, 1999). Phan (2000) argues that partnership strategy is a long-term and trust-based relationship that requires special investment and special relationships in business that cannot be completely determined unilaterally. Pellicelli (2003) states partnership strategy as a form of agreement between companies that remain independent and compete in the competition.

Understanding performance according to Stoner and Freeman (1992) management performance is a measure of how efficient and effective a manager, how he determines and achieves appropriate objectivity. Kaplan and Norton (2008) one of the early initiators in performance measurement introduced the concept of the balanced scorecard (BSC), which consists of two key concepts namely balanced and scorecard. The meaning of balanced is the balance between financial and non-financial performance, short-term and long-term performance and internal and external performance. While scorecard is a card that is used not only to record achievement of performance scores but also used in planning performance scores that will be realized in the future. Initially, BSC was only used for measuring executive performance which only measured financial performance. Improvement in the BSC concept towards the old measurement system that only measures financial performance becomes a measurement of performance from four perspectives.

Furthermore, this BSC is also used to measure the company's performance as a whole. In the framework of Balance Scorecard, in addition to assessing management efficiency and effectiveness, it also measures the extent to which successful implementation of the company's vision, mission, goals, and strategies. According to Kaplan and Norton (2008), there are four perspectives on performance measurement included financial perspective, consumer perspective, the perspective of internal business processes, the perspective of learning and growth process.

Walker *et al.* (2001) said that business performance is an illustration of the achievement of company goals through increased sales and market share. Business performance can also be measured by measuring sales volume, market share, and profits (Aaker, 2017). According to Tangen (2005), business performance can be described as a general term for all concepts that assume the success of the company and its activities include aspects: productivity, profitability, efficiency, and effectiveness. The concept of business performance according to Best (2009), is output or result of implementing all activities related to business activities seen from the marketing aspect. Indicators used include growth, sales, and profitability.

3. Methodology

The data obtained in this study are quantitative data based on survey and qualitative results based on observations, dept interviews, FGDs, and AHP questionnaires. Primary data obtained from distributing questionnaires, interviews, and FGDs to industry players. FGD can be interpreted as a discussion conducted systematically and directed about a particular problem or issue Analytical Hierarchy Process (AHP) Is a method for solving a complex situation that is not structured into several components in a hierarchical arrangement, by giving subjective values about the importance of each variable relative, and determining which variable has the highest priority to influence the outcome of the situation. FGD can be interpreted as a discussion conducted systematically and directed about a particular problem or issue. While secondary data, is data that has been available but has not been processed, obtained from department or company related to unit of analysis, especially about the power plant industry database, annual reports PT PLN, subsidiary PT PLN namely Indonesia Power (IP) and Power Plant Jawa Bali (PJB), reports from Directorate General of Renewable Energy and Energy Conservation of the Ministry of Energy and Mineral Resources (EBTKE), data on Independent Power Producer (IPP), Indonesian Electricity Society (MKI), government institutions, company profiles and government policies related to variables that are topic of research.

Based on data released by the Director General of Electricity there are 85 renewable power plants throughout Indonesia. The population includes state and private companies (IPP). Although the population is not large, the distribution area is wide enough to cover all regions in Indonesia, so that the survey is distributed online and directly.

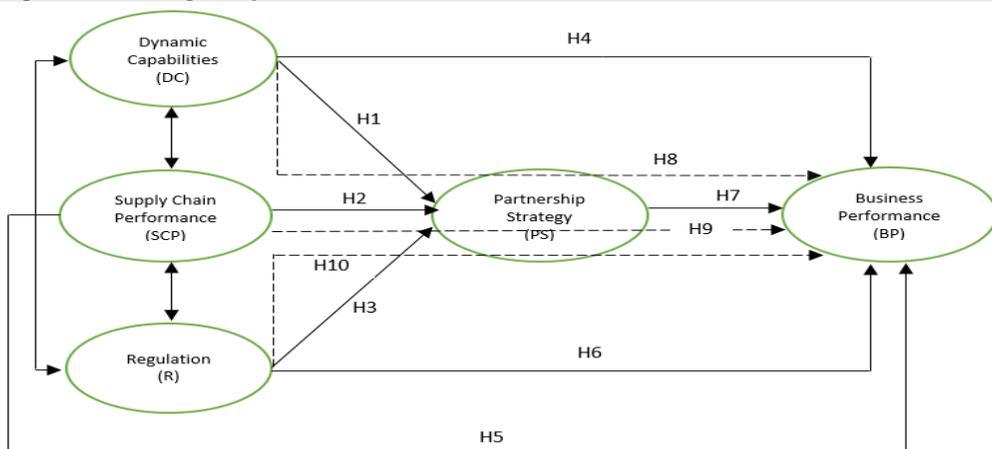
This research was conducted by the census method with sample size covering the entire population. Quantitative research produces finding followed by qualitative research phase which confirms results. In this stage the AHP questionnaire was distributed, dept interviews or FGDs were conducted with an expert as many as 15 selected respondents regarding perceptions of dynamic capability, supply chain performance, regulations, partnership strategy and business performance in renewable industry in Indonesia, using nonprobability sampling, purposive and snowball sampling. The unit of analysis in this study is renewable energy power plants in Indonesia, while the observation unit is Board of Directors/business unit leaders (BOD), senior managers or managers in the renewable industry in Indonesia.

Inductive data collection techniques that are carried out directly to the location, companies that become objects units to obtain the data needed and can observe the conditions that exist in the object of the research. Data collection with a questionnaire in the form of a list of questions. Each question item is classified into six alternative answers using an interval scale that describes the perceptions of

respondents. The rating of each indicator is given a score between 1 and six based on the Likert Scale.

This study was designed to see the relationship between three independent variables namely dynamic capability (ξ_1), supply chain performance (ξ_2) and regulations (ξ_3), to the dependent variable namely business performance (η_2) while the moderating variable is partnership strategy (η_1). Verification research is a technique that analyzes causality between research variables by the hypothesis. The measurement of the five variables in this study is carried out through indicators which are reflections or manifests of the construct that you want to measure.

Figure 1. Conceptual framework



The hypothesis tested in quantitative research consists of 10 hypotheses as follows:

- H1: Dynamic capability positively influences its partnership strategies;*
- H2: Supply chain performance positively influences its partnership strategies;*
- H3: Regulations positively influences its partnership strategies;*
- H4: Dynamic capability positively influences its business performance;*
- H5: Supply chain performance positively influences its business performance;*
- H6: Regulations positively influences its business performance;*
- H7: Partnership strategy positively influences its business performance;*
- H8: Dynamic capability positively influences its business performance through partnership strategies;*
- H9: Supply chain performance positively influences its business performance through partnership strategies;*
- H10: Regulations positively influences its business performance through partnership Strategies.*

The conceptual framework in Figure 1 was developed by the authors who show the direction of the relationships between the three constructs of this research (i.e.,

dynamic capabilities, supply chain performance and regulations) as antecedents of partnership strategy and the ensuing hypotheses.

4. Empirical Findings

Hypothesis testing in this study uses PLS for model evaluation consists of inner and outer model. Inner model tests the influence between latent variables with each other. The analysis of the outer model shows the relationship between latent variables - dimensions and indicators.

Analysis of structural model (inner model):

Inner model is evaluated by using the Goodness of Fit Model (GoF), that show the difference between the values of the observations result with the values predicted by the model.

Table 1. Goodness of fit model

Variable	Communality	GoF	R-Square (R ²)	Q-Square
Business Performance	0.665	0.802	0.733	1
Partnership Strategy	0.647	0.794	0.756	1
Dynamic Capability	0.665	0.788	-	1
Supply Chain Performance	0.726	0.846	-	1
Regulations	0.680	0.815	-	0.998

Source: Calculation Results with SmartPLS ver. 3.0 (2018).

This test is indicated by the value of R-Square on endogenous constructs and Prediction relevance (Q-Square) or known as Stone-Geisser's used to know the capability of prediction with blinding procedure. If the value obtained 0.02 (minor), 0.15 (medium) and 0.35 (large), and only used for the endogenous construct with selective indicator. Refer to Chin (1998), the value of R-Square amounted to 0.67 (strong), 0.33 (medium) and 0.19 (weak).

The table above gives R² in Business Performance as an endogenous variable is in the Strong (> 0.67) criterion, and the value of Q-Square is on the large criteria (> 0.35), so it can be concluded that the research model is supported by empirical conditions or model fit. Based on the research framework, a structural model is determined as follow;

$$\eta_1 = 0.251 * \xi_1 + 0.234 * \xi_2 + 0.512 * \xi_3, \text{ Error var.} = 0.244, R^2 = 0,756$$

$$\eta_2 = 0.027 * \xi_1 + 0.002 * \xi_2 + 0.256 * \xi_3 + 0.618 * \eta_1, \text{ Error var.} = 0.267, R^2 = 0.733$$

Can be explained as follows:

- η_2 = Business performance;
- η_1 = Partnership strategy;
- ξ_1 = Dynamic capability;
- ξ_2 = Supply chain performance;
- ξ_3 = Regulation;
- ζ_i = Residual;

Measurement model (outer model);

Analysis of the outer model used as validity and reliability test to measure latent variabel and indicator in measuring dimension that is constructed. It can be explained by:

- Convergent validity: The value of convergent validity is the value of loading factors on latent variables with the indicator. Expected value > 0.7.
- The validity of discrimination: Is a value of loading factor that is useful to determine whether the construct has adequate discriminant that is by comparing the value of loading on the intended construct greater than the value of loading with other constructions.
- Composite reliability: Composite reliability and Cronbachs alpha of variabels > 0,70 (Nunnaly, 1994) show that all of the variables in the model estimated to fulfill the criteria of discriminant validity.
- Average variance extracted (AVE). Expected AVE value > 0.5. Then, it can be concluded that all of the variables have good reliability.

Table 2. Loading factor of laten variable dimension- indicator- 1st order

Variable	Indicator	Standardized Loading (λ)	SE (λ)	t value	Error Variance	Construct Reliability (CR)	Average Variance Extracted (AVE)
Dynamic Capability	KD1 <- Learning	0,813	0,029	28,326	0,340	0,940	0,757
	KD2 <- Learning	0,855	0,023	36,740	0,269		
	KD3 <- Learning	0,899	0,011	79,234	0,192		
	KD4 <- Learning	0,904	0,014	62,513	0,183		
	KD5 <- Learning	0,877	0,018	48,816	0,231		
	KD6 <- Learning	0,852	0,020	41,754	0,273	0,917	0,735
	KD7 <- Learning	0,884	0,018	49,357	0,218		
	KD8 <- Learning	0,863	0,033	26,372	0,255		
	KD9 <- Learning	0,829	0,030	27,325	0,313		
	KD10 <- Integration	0,839	0,028	30,251	0,295	0,939	0,755
	KD11 <- Integration	0,876	0,019	46,587	0,233		
	KD12 <- Integration	0,878	0,020	43,603	0,229		

Variable	Indicator	Standardized Loading (λ)	SE (λ)	t value	Error Variance	Construct Reliability (CR)	Average Variance Extracted (AVE)
	KD13 <- Integration	0,885	0,018	48,493	0,217		
	KD14 <- Integration	0,867	0,019	46,551	0,249		
	KD15 <- Coordination	0,867	0,022	39,621	0,248	0,931	0,771
	KD16 <- Coordination	0,875	0,018	48,231	0,235		
	KD17 <- Coordination	0,882	0,018	48,965	0,222		
	KD18 <- Coordination	0,890	0,017	53,388	0,209		
Supply Chain Performance	RP1 <- Completeness of Supplier Resources	0,834	0,031	26,535	0,304	0,951	0,735
	RP2 <- Completeness of Supplier Resources	0,865	0,021	41,264	0,252		
	RP3 <- Completeness of Supplier Resources	0,875	0,017	51,014	0,234		
	RP4 <- Completeness of Supplier Resources	0,872	0,016	53,107	0,240		
	RP5 <- Completeness of Supplier Resources	0,850	0,025	34,244	0,278		
	RP6 <- Completeness of Supplier Resources	0,828	0,028	29,542	0,314		
	RP7 <- Completeness of Supplier Resources	0,875	0,024	36,293	0,234		
	RP8 <- Work Performance	0,896	0,020	44,594	0,197	0,942	0,732
	RP9 <- Work Performance	0,858	0,029	29,228	0,264		
	RP10 <- Work Performance	0,840	0,027	30,555	0,295		
	RP11 <- Work Performance	0,784	0,036	22,056	0,386		
	RP12 <- Work Performance	0,846	0,024	34,702	0,285		
	RP13 <- Work Performance	0,904	0,018	50,924	0,183		
	RP14 <- Relationship Quality	0,898	0,016	54,890	0,193	0,936	0,745
	RP15 <- Relationship Quality	0,819	0,031	26,729	0,329		
	RP16 <- Relationship Quality	0,835	0,028	29,356	0,302		
	RP17 <- Relationship Quality	0,901	0,018	49,308	0,189		
	RP18 <- Relationship Quality	0,861	0,029	29,242	0,259		

Variable	Indicator	Standardized Loading (λ)	SE (λ)	t value	Error Variance	Construct Reliability (CR)	Average Variance Extracted (AVE)
Regulation	REG1 <- Central Government	0,889	0,019	47,410	0,210	0,935	0,781
	REG2 <- Central Government	0,884	0,027	33,314	0,219		
	REG3 <- Central Government	0,868	0,025	35,021	0,247		
	REG4 <- Central Government	0,894	0,017	52,410	0,200		
	REG5 <- Local Government Level I/ Provincial Government	0,885	0,025	35,536	0,216	0,927	0,760
	REG6 <- Local Government Level I/ Provincial Government	0,836	0,030	27,446	0,302		
	REG7 <- Local Government Level I/ Provincial Government	0,876	0,022	40,608	0,232		
	REG8 <- Government Level I/ Provincial Government	0,890	0,019	48,032	0,208		
	REG9 <- Local Government Level II / (District / City)	0,882	0,019	45,719	0,221	0,915	0,729
	REG10 <- Local Government Level II / (District / City)	0,838	0,025	33,106	0,297		
	REG11 <- Local Government Level II / (District / City)	0,845	0,024	35,008	0,286		
	REG12 <- Local Government Level II / (District / City)	0,849	0,021	41,284	0,280		
Partnership Strategy	SK1 <- Internal	0,892	0,019	47,368	0,203	0,933	0,776
	SK2 <- Internal	0,883	0,017	52,250	0,220		
	SK3 <- Internal	0,877	0,019	45,294	0,230		
	SK4 <- Internal	0,870	0,018	47,744	0,244		
	SK5 <- Supplier	0,901	0,016	54,705	0,188	0,953	0,803
	SK6 <- Supplier	0,917	0,013	69,056	0,158		
	SK7 <- Supplier	0,909	0,013	67,846	0,173		
	SK8 <- Supplier	0,883	0,021	41,489	0,221		
	SK9 <- Supplier	0,870	0,019	45,177	0,243		

Variable	Indicator	Standardized Loading (λ)	SE (λ)	t value	Error Variance	Construct Reliability (CR)	Average Variance Extracted (AVE)
	SK10 <- Customer	0,938	0,012	79,011	0,121	0,941	0,842
	SK11 <- Customer	0,930	0,014	68,577	0,136		
	SK12 <- Customer	0,884	0,021	43,003	0,218		
	SK13 <- Lateral	0,872	0,019	44,966	0,240	0,957	0,789
	SK14 <- Lateral	0,891	0,017	51,412	0,206		
	SK15 <- Lateral	0,870	0,021	42,139	0,243		
	SK16 <- Lateral	0,897	0,016	57,632	0,195		
	SK17 <- Lateral	0,913	0,016	57,027	0,166		
	SK18 <- Lateral	0,886	0,020	45,044	0,214		
Business Performance	KB1 <- Financial Perspektif	0,837	0,025	32,924	0,300	0,938	0,750
	KB2 <- Financial Perspektif	0,860	0,019	46,286	0,261		
	KB3 <- Financial Perspektif	0,870	0,021	40,984	0,243		
	KB4 <- Financial Perspektif	0,862	0,021	40,764	0,256		
	KB5 <- Financial Perspektif	0,901	0,013	71,653	0,188		
	KB6 <- Non Financial Perspektif	0,899	0,019	46,365	0,192	0,956	0,784
	KB7 <- Non Financial Perspektif	0,893	0,022	41,507	0,202		
	KB8 <- Non Financial Perspektif	0,893	0,017	51,322	0,202		
	KB9 <- Non Financial Perspektif	0,897	0,017	52,196	0,195		
	KB10 <- Non Financial Perspektif	0,878	0,028	31,710	0,228		
	KB11 <- Non Financial Perspektif	0,852	0,026	32,294	0,275		

Source: Calculation Results with SmartPLS ver. 3.0 (2018).

The results of several construct measurements for convergence validity can be seen from the factor loading value in table 4.8. Reference to standardize loading (equal to 0.50 or more is considered to have sufficient validation to explain latent constructs (Hair et al., 2010). Another requirement that must be fulfilled is that the resulting loading factor must be significant, p. this can be seen from t count > t table, and or loading factor > 0.5 is more ideal if loading factor > 0.7.

The result of the measurement model of latent variables on their dimensions shows to what extent the validity of dimensions in measuring latent variables.

Table 3 shows the result of the measurement model for each latent variables on dimensions. Figure 2 shows the complete path diagram and Table 4 the hypotheses testing:

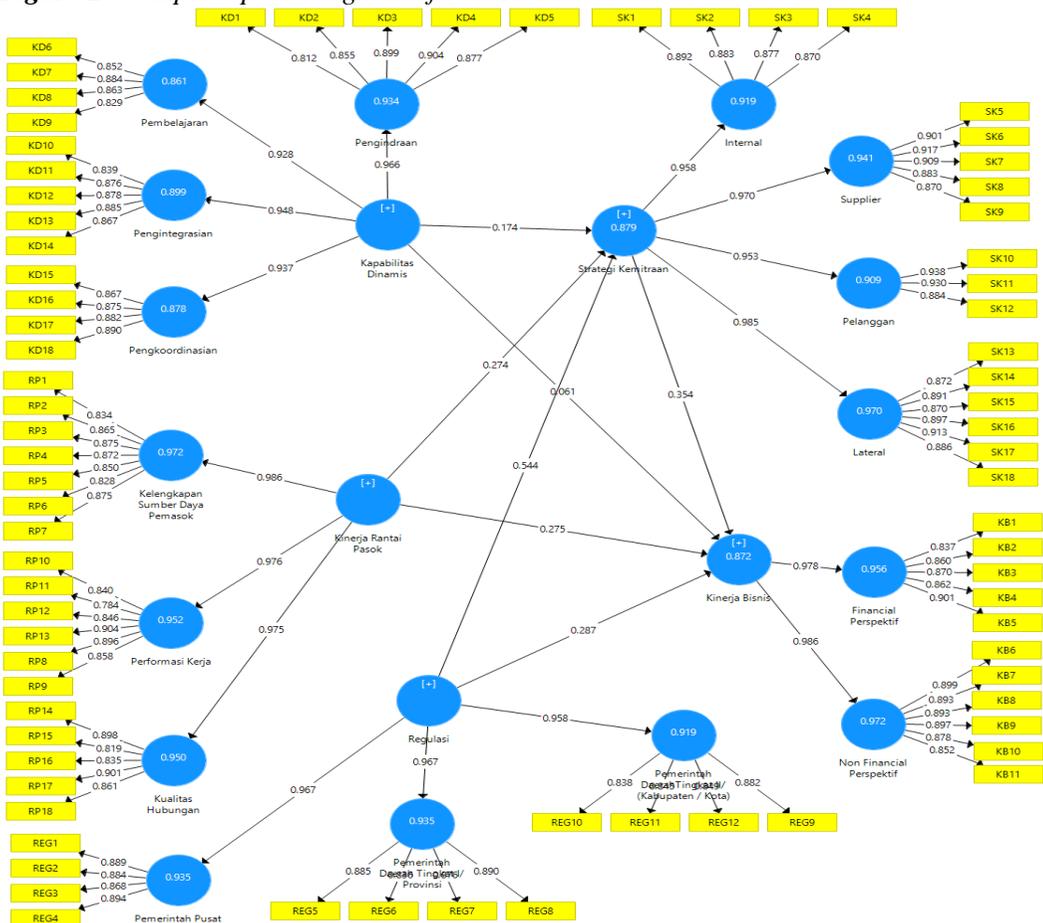
Table 3. Loading factor of laten variable-dimension-indicator- 2nd order

Variable	Indicator	Standardized Loading (λ)	SE (λ)	t value	Error Variance	Construct Reliability (CR)	Average Variance Extracted (AVE)
Dynamic Capability	Dynamic Capability -> Learning	0,928	0,015	63,037	0,139	0,974	0,676
	Dynamic Capability -> Sensing	0,966	0,007	139,413	0,066		
	Dynamic Capability -> Integration	0,948	0,014	66,636	0,101		
	Dynamic Capability -> Coordination	0,937	0,015	64,502	0,122		
Supply Chain Performance	Supply Chain Performance -> Relationship Quality	0,975	0,007	132,588	0,050	0,977	0,707
	Supply Chain Performance-> Work Performance	0,976	0,007	143,886	0,048		
	Supply Chain Performance-> Completeness of Supplier Resources	0,986	0,003	324,383	0,028		
Regulation	Regulation -> Central Government	0,967	0,007	135,123	0,065	0,966	0,703
	Regulation -> Government Level I/ Provincial Government	0,967	0,007	148,518	0,065		
	Regulation -> Local Government Level II / (District / City)	0,958	0,009	103,269	0,081		
Partnership Strategy	Partnership Strategy -> Internal	0,958	0,008	112,992	0,081	0,982	0,750
	Partnership Strategy -> Lateral	0,985	0,002	458,151	0,030		

Variable	Indicator	Standardized Loading (λ)	SE (λ)	t value	Error Variance	Construct Reliability (CR)	Average Variance Extracted (AVE)
	Partnership Strategy -> Customer	0,953	0,012	80,424	0,091		
	Partnership Strategy -> Supplier	0,970	0,005	200,064	0,059	0,969	0,742
Business Performance	Performance-> Financial Perspektif	0,978	0,005	211,066	0,044		
	Performance-> Non Financial Perspektif	0,986	0,003	361,451	0,028		

Source: Calculation Results with SmartPLS ver. 3.0 (2018).

Figure 2. Complete path diagram of researcher model



Source: Calculation Results with SmartPLS ver. 3.0 (2018).

Table 4. Hypothesis testing

No	Hypothesis	Coefficient Estimation (γ_{ij})	SE (γ_{ij})	t value and z value	R-Square (R^2)	Conclusion (H_0)
1	Dynamic capability -> partnership strategies	0,174	0,059	2,955*	0,137	Hypothesis Rejected
2	Supply chain performance -> partnership strategies	0,274	0,105	2,618*	0,246	Hypothesis Rejected
3	Regulations -> partnership strategies	0,544	0,095	5,739*	0,496	Hypothesis Rejected
4	Dynamic capability -> business performance	0,061	0,097	0,628	0,030	Hypothesis Accepted
5	Supply chain performance -> business performance	0,275	0,103	2,668*	0,159	Hypothesis Rejected
6	Regulations -> business performance	0,287	0,133	2,165*	0,165	Hypothesis Rejected
7	Partnership strategy -> business performance	0,354	0,122	2,895*	0,125	Hypothesis Rejected
8	Dynamic capability -> partnership strategies -> business performance	0,062	0,030	2,072**	0,062	Hypothesis Rejected
9	Supply chain performance -> partnership strategies -> business performance	0,097	0,049	1,988**	0,097	Hypothesis Rejected
10	Regulations -> partnership strategies -> business performance	0,193	0,074	2,587**	0,193	Hypothesis Rejected

Note: * significant at $\alpha=0.05$ (t table =1.98), ** significant at $\alpha=0.05$ (z table =1.98) Sobel Test

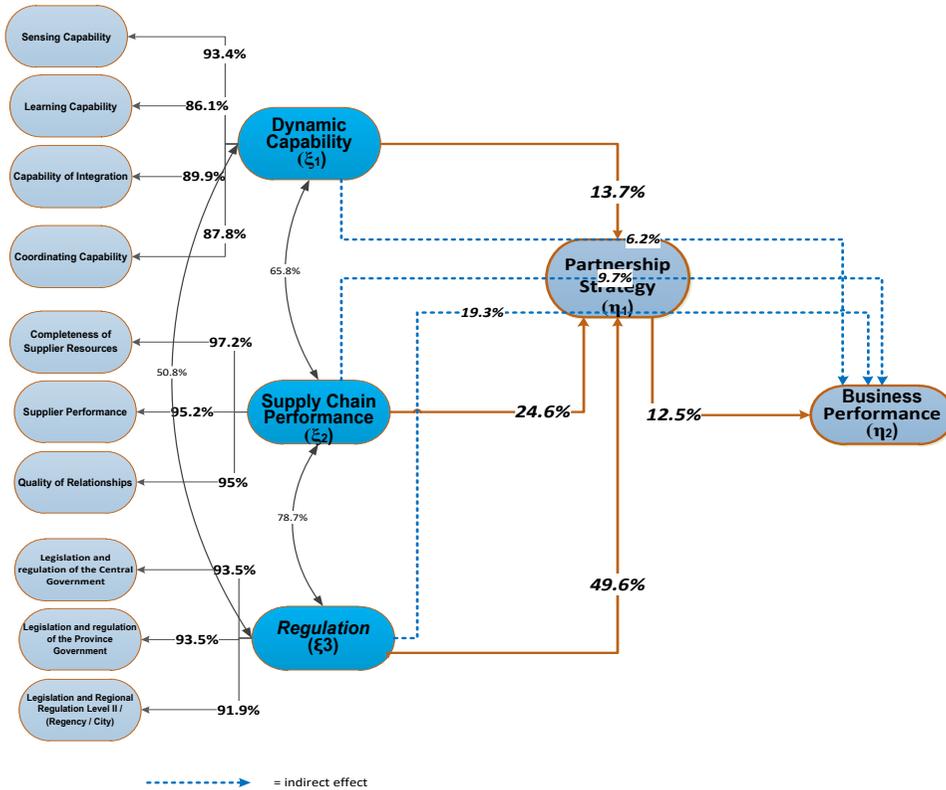
Source: Calculation Results with SmartPLS ver.3.0 (2018).

Hypotheses 1 – 3, states that dynamic capability have partially influential significantly to partnership strategy, which is dynamic capability has the lowest influence ($R^2=13.7\%$) and regulations have a greater influence ($R^2=49.6\%$). Hypothesis 4 - 6 states that there is no significant effect partially from the dynamic capability to business performance while regulations have a greater influence ($R^2=16.5\%$) followed by supply chain performance ($R^2=15.9\%$). Hypothesis 7 shows that partnership strategy affects business performance with ($R^2=12.5\%$). While hipotesis 8, states that dynamic capability affects business performance through partnership strategy ($R^2=6.2\%$). Hipotesis 9, states that supply chain performance affects business performance through partnership strategy ($R^2=9.7\%$) and than last hipotesis, state that regulation affects business performance through partnership strategy ($R^2=19.3\%$). Based on results of a partial test it was concluded that all exogenous variables had positive and significant influence on business performance through partnership strategy, where the greatest influence came from regulations followed by performance supply chain and dynamic capability.

The strongest indicator in representing dynamic capabilities sequentially is coordination and learning ability. Supply chain performance is represented most strongly by indicators of completeness of supplier resources. Regulations are represented most strongly by central and provincial level regulations. The

partnership strategy is represented most strongly by lateral partnerships. While business performance is represented by the strongest non-financial perspective.

Figure 3. Hypothetical model



5. Conclusions

The study has investigated the effect of dynamic capability, supply chain performance and regulation on business performance and partnership strategy as its moderating factor. Additionally, four dimensions of partnership strategy have been selected; partnership with internal, supplier, customer and lateral. Test results show that increase in dynamic capability, supply chain performance and regulation will improve partnership strategy which then has implications for improving renewable energy industry performance in Indonesia, where the role of regulation is most dominant followed by supply chain performance and least influential is dynamic capability. The strongest indicator in representing dynamic capabilities in this study is coordination and learning ability. The coordination and learning ability is then significantly able to influence performance when combined with the intervening variable in this study is a partnership strategy. The coordinating aspect as the most dominant factor in the variable dynamic capability is combined with internal

partnerships as one of the dominant aspects of the partnership strategy variable. Coordinating aspects include; synchronization, managing the provision of skilled human resources, preparing with industry needs and coordinating their influence in creating vertical and horizontal synergies, for example by creating communities/ associations with a vision and purpose by providing distinct benefits. The association can provide training, seminars, and skills needed in their fields of expertise and specificity. It can also be in the form of joint research/collaboration with educational institutions/R&D in and outside the country, conducting internal and external learning and knowledge management/ collaborative research.

The result also supports our view that business performance is impacted by the synergy among the three, dynamic capabilities, supply chain performance and regulation through partnership strategy. Three aspects, dynamic capability, supply chain performance, and regulation performance have a smaller effect than effect when passing partnership strategy as an intervening variable. The effect of the three direct aspects of the strongest performance is also dominated by regulation. The partnership strategy has a substantial and significant effect on performance.

Practically this research model is largely relevant for top corporate executives (Board of Directors) or top management of renewable energy and government who are struggling to find strategies to improve performance. Superior business performance is expected goal in supporting the sustainability of the company so that the power plant industry as the national electricity supply provider can carry out its role optimally in strengthening national energy security. Providing support to the community and local government to create green energy which can be the best alternative created in every home/village by utilizing the potential of local renewable energy sources. Transforming the internal capabilities of the renewable industry is more in line with changes in the environment and the market in creating more futuristic power generation industries, complementing the map of sustainable energy one map.

In optimal conditions, it is expected that power plant industry can provide sustainable electricity supply in line with ever-increasing demand, expand electrification reach to remote villages, able to transform the use of primary energy sources from fossils to environmentally friendly renewable energy where potential is widely spread throughout the region. Make an efficient supply chain in its operational activities and shorten the supply chain of raw materials, main materials, and supporting materials to produce more economical electricity prices as the part financial aspect of perspective. Develop industries that produce supporting machines to reduce dependence on imported components and move the real sector and industry in the country. Creating better and more appropriate regulations, synergies and synchronies to encourage renewable industries to grow, attract investors, provide a lot of ease of import tax on machinery and renewable energy technologies, seek renewable technology to be very cheap, open smart and hybrid grid systems so that people can sell excess electricity easily to PLN, redirecting fuel oil subsidies to

renewable energy, setting electricity purchase prices of renewable energy higher than energy from petroleum (feed in tarif), providing interest subsidies for loans/working capital for the renewable energy industry and improving partnership strategies Involving the participation of people in urban and rural areas, local governments, private parties, academics, environmental activists and all relevant stakeholders. Achievement non-financial performance indicated with a decrease in the level of disruption, voltage instability, and power outages. Findings of this study are expected to be a reference for further research relating to the development of partnership strategy model in improving business performance that is influenced by dynamic capability, supply chain performance and regulation as part of the premise in preparation of framework.

This research is limited to reviewing the description and influence of variables studied. Variables that are the focus of study include dynamic capability, supply chain performance, regulation, partnership strategy, and business performance. The model that the author examines is focused on the renewable industry in Indonesia and so far has never been researched and published before. Further research is recommended for different contexts with a broader unit of analysis and models that include other variables such as good corporate governance, innovation management, and energy management systems. Also, further research can raise phenomena or gaps such as regulations that are only good on paper (the paper tiger) with real conditions in the field that have not reached the target and the factors that influence it.

References:

- Aaker, D.A. 2017. *Strategic Market Management*, 11th Edition. John Wiley & Sons, Inc., Wiley International Edition.
- Asmar, A.S. 2018. *Strategi Harmonisasi Regulasi Hubungan Pusat dan Daerah*. Bilancia, Vol. 12, No. 1, pp. 1-26.
- Beamon, B.M. 2013. *Measuring Supply Chain Performance*. *International Journal of Operation & Production Management*, 19(3).
- Best, R.J. 2009. *Market-Based Management; Strategies for Growing Customer Value and Profitability*, Third Edition. New Jersey: Prentice Hall.
- Dussauge, P. & Garrette, B. 1995. *Determinants of success in international strategic alliances: Evidence from the global aerospace industry*. *Journal of International Business Studies*, 26, 505-530.
- Douma, M.U. 1997. *Strategic Alliances: fit or failure*, Ph.D. Thesis. Netherlands: University of Twente.
- Eisenhardt, K.M. & Martin, J.A. 2000. *Dynamic Capabilities: What Are They?* *Strategic Management Journal*, 21, 1105-1121.
- Enggarani, N.S. 2016. *Kualitas Pelayanan Publik dalam Perizinan di Pelayanan Terpadu Satu Pintu (PTSP) Kantor Badan Penanaman Modal dan Pelayanan Perizinan Terpadu (BPMP2T) Kabupaten Boyolali*. *Jurnal Law and Justice Fakultas Hukum Universitas Muhammadiyah Surakarta*, Vol. 1, No. 1.
- ESDM. 2018. *Wamen Archandra: Pemerintah berusaha memastikan Ketahanan Energi Nasional Dengan pendekatan 4A*,

- <http://ebtke.esdm.go.id/post/2018/10/29/2043/wamen.archandra.pemerintah.berusaha.memastikan.ketahanan.energi.nasional.dengan.pendekatan.4a>
- Faulkner, H.J.H. 1995. Public-private partnerships in sustainable development. *Review of European, Comparative & International Environmental Law*, 49(2), 133-136.
- Firdaus, B. 2017. Masalah Regulasi dan Pengawasan Dalam Praktek Korupsi Haji Tahun 2010-2013. *Jurnal Politik*, Vol. 3, No. 1, pp. 109-146.
- Frankel, J.A. & Andrew, K.R. 1996. Currency Crashes in Emerging Markets: An Empirical Treatment. *Journal of International Economics*, 41(3-4), 351-366.
- Galunic, D.C. & Eisenhardt, K.M. 2001. Architectural innovation and modular corporate forms. *Academy of Management Journal*, 44, 1229 – 1249.
- Gamidullaeva, L. 2018. Towards Combining the Innovation Ecosystem Concept with Intermediary Approach to Regional Innovation Development. *International Journal of Economics & Business Administration*, 6(1), 39-53.
- Griffith, D.A. & Harvey, M.G. 2001. A resource perspective of global dynamic capabilities. *Journal of International Business Studies*, 32(3), 597-606.
- Gulati, R. 1998. Alliance and Networks. *Strategic Management Journal*, 19, 293-317.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. 2010. *Multivariate Data Analysis*, 7th ed. Pearson Prentice Hall, New Jersey.
- Harland, C.M. 1996. Supply Chain Management: Relationships, Chains and Networks. *British Journal of Management*, 7(1), 63-80.
- Heizer, J. & Render, B. 2014. *Operations Management*, 11th Edition. Pearson Education, Inc. New Jersey.
- Helfat, C.E. 1997. Know-how and Asset Complementarity and Dynamic Capability accumulation: the Case of R&D. *Strategic Management Journal*, 18(5), 339-360.
- International Energy Agency (IEA). 2015. *Southeast Asia Energy Outlook 2015*. Paris: International Energy Agency.
- Janvier, M., Assey, J. 2012. A New Introduction to Supply Chain and Supply Chain Management; Definition and Theories Perspective. *Journal of International Business Research*, 5(1).
- Jimly, A. 2015. *Pengantar Ilmu Hukum Tata Negara*. PT Rajagrafindo Persada, Jakarta.
- Kaplan, R.S. & Norton, D.P. 2008. *Integrating Strategy Planning and Operational Execution: A Six Stage System*. Harvard Business School Publishing.
- Kaplan, R.S. & Norton, D.P. 1996. Strategic Learning & the Balanced Scorecard. *Strategy & Leadership*, Vol. 24, Issue 5, pp. 18-24.
- Khusna, I.H. & Susilowati, N. 2015. Regulasi Media di Indonesia: Kajian Pada Keterbukaan Informasi Publik dan Penyiaran. *Promedia*, Vol. 1, No. 2, pp. 92-104.
- Kurtubi. 2018. Kurtubi dorong energy nuklir menjadi pembahasan WPFSD. <http://www.dpr.go.id/berita/detail/id/22072/t/Kurtubi+Dorong+Energi+Nuklir+Menjadi+Pembahasan+WPFSD>
- Liputra, D.T., Santoso, Susanto, A.N. 2018. Pengukuran Kinerja Rantai PASok dengan Model Supply Chain Operations Reference (SCOR) dan Metode Perbandingan Berpasangan, *Jurnal Rekayasa Sistem Industri*, 7(2).
- Li, L. 2007. *Supply chain management: concept, techniques and practices enhancing value through collaboration*. Singapore: World Scientific Publishing.
- Lokollo, E.M. 2012. *Supply Chain Management (SCM) at au Manajemen Rantai Pasok*. Dalam: E.M. Lokollo (ed.). *Bunga Rampai Rantai Pasok Komoditas Pertanian Indonesia*. Bogor: IPB Press.

- Lyasnikov, V.N., Frolova, E.E., Mamedov, A.A., Zinkovskii, B.S., Voikova, A.N. 2017. Venture Capital Financing as a Mechanism for Impelling Innovation Activity. *European Research Studies Journal*, 20(2B), 111-122.
- Marimin, Maghfiroh, N. 2013. *Teknik dan Analisis Pengambilan Keputusan Fuzzy Dalam Manajemen Rantai Pasok*. Bogor (ID): IPB Press.
- Muhlizi, A.F. 2017. Penataan Regulasi Dalam Mendukung Pembangunan Ekonomi Nasional. *Jurnal Rechtsvinding: Media Pembinaan Hukum Nasional*, Vol. 6, No. 3, pp. 349-367.
- OECD. 2017. Population and Migration. www.oecd.org/sdd/01_Population_and_migration.pdf
- Pavlou, P.A. & El Sawy, O. 2011. Understanding the Elusive Black Box of Dynamic Capabilities. *Decision Science*, 42/1, 239-273.
- Phan, P.H. 2000. Knowledge Creation Strategic Alliance: Another Look at Organizational Learning. *Asia Pacific Journal of Management*, 12, 201-222.
- Pellicelli, A.C. 2003. Strategic Alliances. EADI Workshop "Clusters and global value chains in the North and the Third world". 30/31 October 2003, Novara.
- Rindova, V. & Kotha, S. 2001. Continuous morphing: Competing through Dynamic Capabilities, Form, and Function. *Academy of Management Journal*, 44, 1263-1280.
- Rahmasari, L. 2011. Pengaruh supply chain management terhadap kinerja perusahaan dan keunggulan bersaing. *Informatika*, 2(3), 89-103.
- Ristek-Dikti. 2016. Blueprint pengelolaan energi nasional 2006–2015. https://www.esdm.go.id/assets/media/content/Blueprint_PEN_tgl_10_Nop_2007.pdf
- Saptana, & Yofa, R.D. 2016. Penerapan Konsep Manajemen Rantai Pasok Pada Produk Unggas. *Forum Penelitian Agro Ekonomi*, 34(2), 143-161.
- Shu-Mei Tseng, & Pei Shan, L. 2014. The Effect of Knowledge Management Capability and Dynamic Capability on Organization Performance. *Journal of Enterprise Information Management*, 27/2, 158-179.
- Stoner, J.A.F., Freeman, R.E. & Gilbert, D.R.Jr. 1995. *Management*, 6th Edition. Prentice Hall, Englewood Cliffs, New Jersey.
- Tangen, S. 2005. Demystifying Productivity and Performance. *International Journal of Management*, 54/1, 34-46.
- Teece, D.J., Pisano, G., Shuen, A. 1997. Business Models, Dynamic Capabilities and Strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Teece, D.J. 2007. Explicating Dynamic Capabilities; The Nature and Micro Foundations of Sustainable Enterprise Performance. *Strategic Management Journal*, 28(7), 1319-1350.
- Walker, A. Ritter, T. & Gemunden, H.G. 2011. Value Creation in Buyer-Seller Relationship. *Industrial Marketing Management*, 30(4), 365-367.
- Wang, C.L. & Ahmed, P.K. 2007. Dynamic Capabilities; A review and Research Agenda. *The International Journal of Management Review*, 9(1), 31-51.
- Yoshino, M.Y. & Rangan, U.S. 1995. *Strategic Alliances - An Entrepreneurial Approach to Globalization*. Boston: Harvard Business School Press.
- Zahra, S.A. & George, G. 2002. Absorptive Capacity: a Review, Reconceptualization, and Extension. *Academy of Management Review*, 27(2), 185-203.
- Zollo, M. & Winter, S.G. 2002. Diliberate Learning and The Evolution of Dynamic Capabilities. *Organization Science*, 13(3), 339 – 351.