Dynamic capability as antecedent to firm efficiency

Muhammad Munir¹; Edi Abdurachman²; Dyah Budiastuti³; Firdaus Alamsjah⁴

^{1,4}Bina Nusantara University, Binus Business School. Hang Lekir I No. 6, Senayan, Jakarta 10270

^{2, 3}Bina Nusantara University, Doctoral of Research in Management. Kebon Jeruk Raya No. 27, Kebon Jeruk, Jakarta 11530 ¹mmunir.mm@gmail.com, ²EdiA@binus.edu, ³dbudiastuti@binus.edu, ⁴alamsjah@binus.edu

ABSTRACT

Indonesia is one of the significant players in the international petroleum industry. However, Indonesia's petroleum industry is arguably now in a transitional phase. Recent depletion of oil resources in Indonesia was caused by low productivity and high consumption. The operational productivity of petroleum has a high risk of failure. Thus, the efficiency of firm performance must be improved. This study investigates the impact of work professionalism, ambidextrous leadership, and dynamic capabilities in efficiency on Indonesia's petroleum industry. This study uses work professionalism and ambidextrous leadership as antecedents of personal dynamic capabilities. The research model and hypothesis were developed from the literature cited, and the hypothesis was tested based on data collected through 156 questionnaires from eight petroleum companies in Indonesia. The data obtained from questionnaires were analysed through covariance-based structural equation modelling. The results from the study indicate that dynamic capabilities have a significant effect on efficiency, and work professionalism and ambidextrous leadership also have significant positive effects on efficiency. The managerial implication from this study is that Indonesia's petroleum stakeholders must empower the personal traits of dynamic capabilities and ambidextrous leadership in order to increase firm efficiency that in turn mitigates a low productivity situation in the oil sector

Keywords

Work Professionalism, Ambidextrous Leadership, Dynamic Capability, and Efficiency

Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020

Introduction

Indonesia has been active in the oil industry for nearly 130 years and is one of the significant players in the international oil industry (PWC, 2018). The oil and gas industries have experienced dramatic volatility in the last five years, both globally and specifically in Indonesia. The Indonesian oil industry experienced volatility in oil barrel price, declining oil production and increased consumption (PWC, 2018). Data shows oil consumption is 1.6 million barrels per day, so Indonesia should import more than 800,000 BPOD (Barrel Oil per Day). It is estimated that by 2025, Indonesia will import one to two million BPOD. However, high import will disrupt the national income budget. Therefore, Indonesia's petroleum companies need to focus on their performance. Firm performance efficiency is deemed to be a target that must be achieved and is primarily done so by the petroleum companies' executives.

This study focuses on the efficiency side of firm In the stream of strategic management performance. literature, dynamic capability is one of the firm capabilities that enable organisations to sustain and increase performance in the face of changing business environments (D. J. Teece & others, 1997). To cope with the dramatic volatile change in the petroleum industry, Indonesia's petroleum firms need to have dynamic capabilities. This study employs personal dynamic capabilities as one of the antecedent variables of efficiency. For firms to be successful in the long run, it is necessary for them to be empowered for both explorative and exploitative measures (Rosing, Frese, & Bausch, 2011). Indonesia's petroleum firms must also encompass both explorative and exploitative ability in their leadership to be sustainable and successful during volatility in the petroleum industry. This study employs ambidextrous leadership as one of the antecedents for dynamic capabilities

and efficiency performance. The novelty of this research is found in the exploration of personal traits of dynamic capabilities, ambidextrous leadership and efficiency performance.

There are several objectives guiding this study. First is an effort to investigate the role of personal dynamic capabilities in efficiency performance. Second is to investigate the role of ambidextrous leadership in efficiency performance and personal dynamic capabilities. Third, this study focuses on the efficiency side of firm performance. In the strategic management literature, dynamic capabilities enable organisations to sustain and increase performance in the face of a changing business environment (D. J. Teece & others, 1997).

Efficiency is deemed as a target that must be achieved by the petroleum company's executives. The depletion of oil resources has been caused by the low productivity and high consumption. The data shows the oil consumption is 1.6 million barrels per day, so Indonesia should import more than 800 thousand BPOD (Barrel Oil per Day). It is estimated that by 2025, Indonesia will import one to two million BPOD (Sukmana,2016). High imports will disrupt the national income budget. This will worsen if the majority of the national oil supply will depend on imports and could lead to a national crisis. The original definition of dynamic capabilities refers to "the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" (D. Teece, Pisano, & Shuen, 1997). A dynamic capability is the capacity of an organisation to purposefully create, extend, or modify its resource base (Helfat & Peteraf, 2009).

Similarly, the dynamic capability chain can be found in the resource-based view (Eisenhardt & Martin, 2000). Competitive advantage is highly dependent on the resources of the company (Barney, 1991). Human resources make up a

major factor in determining a company's success in achieving its goals. Efficiency remains relevant in the midst of a world that is striving to accommodate a fast-growing population and manage the distribution of natural resources to meet a wide range of needs (Archer, 2010). Every worker, as part of the company's assets, is required to think about and act on how to work more efficiently in order to increase work productivity.

1. Problem Formulation.

Focusing on internal competence in upstream petroleum companies, this paper explores how much the influence of ambidextrous leadership and work professionalism on individual dynamic capability factors into improving efficiency. Efficiency is the main problem according to various interviews with petroleum company officials and government in the field.

2. Objective and Benefits.

The objective of this study is to investigate the influence of ambidextrous leadership and work professionalism on individual dynamic capability in improving efficiency in the petroleum company. The benefits are: expected to motivate all stakeholders in the upstream petroleum company to increase the efficiency of all activities in order to increase productivity and maintain the sustainability of a company.

Literature Review

Efficiency

Firm performance is a multi-faceted subject. An important theme of performance is that of efficiency versus effectiveness (Wong, Soh, Chong, & Karia, 2012). Efficiency in firm performance deals with the allocation of resources across alternative uses. In other words, it is about minimising inputs for a given level of output. Effectiveness, on the other hand, is concerned with determining a strategy to maximise revenue with a given level of input (Achabal, Heineke, & McIntyre, 1984). Gronroos & Ojasalo (2002) stated that there are two sides of firm performance: efficiency that deals with the cost through the effective use of resources and effectiveness that deals with revenuegenerating ability. The efficiency in this study deals with the efficiency side of firm performance. Efficiency in this study is defined as the measure of effectiveness that produces a desired outcome with the minimum waste of time, effort and skill (Archer, 2010).

Personal Dynamic Capabilities

Dynamic capabilities enable organisations to integrate, build, and reconfigure their resources and competencies and therefore maintain performance in the face of changing business environment (D. Teece et al., 1997). D. J. Teece (2007) stated that operational help to sustain an organisation technical fit by ensuring its day to day operational efficiency, while dynamic capabilities help firms to sustain evolutionary fitness by enabling the creation, extension and modification of its resource base, thereby creating longrunning competitive success (Protogerou, Caloghirou, & Lioukas, 2012; D. J. Teece, 2007). The term "dynamic capabilities" refers to firms' ability to integrate, build, and reconfigure internal and external competences to address rapidly-changing environments (D. Teece et al., 1997). The dynamic capabilities concept was based on a resource-based view of strategy (Barney, 1991). Wieczorek & Mitrega (2017) developed the concept of personal dynamic capabilities traits in organisations. The idea of personal dynamic capabilities was based on the view that dynamic capabilities can be understood as behavioural routines from the members of an organisation, and thus, there is no one dynamic capability but a variety of dynamic capability traits from a given group of members of an organisation (Wieczorek & Mitrega, 2017).

Previous studies in strategic management have proven the effect of dynamic capabilities on a firm's performance. A study by Pervan, Curak, & Pavic Kramaric (2017) proved that dynamic capabilities have a positive and significant effect on a firm's performance. Another study by K.-W. Lin & Kai-Ping (2012) also proved dynamic capabilities to be highly significant toward successful organisational performance.

Thus, this study develops hypothesis 1.

H1. Personal dynamic capabilities have positive significant effects on efficiency.

Ambidextrous Leadership

For firms to be successful in the long run, it is necessary for them to empower both explorative and exploitative measures (Rosing et al., 2011). An ambidextrous organisation is an organisation that achieves a balance of being explorative and exploitative (Gerybadze, Hommel, Reiners, & Thomaschewski, 2010; Raisch & Birkinshaw, 2008; Rosing et al., 2011). The concept of ambidexterity was originally developed for the organisation level. However, according to Rosing et al. (2011), the concept of ambidexterity actually refers to the team and individual levels of an organisation. In their study, they expanded the concept of ambidexterity into leadership of teams and individuals. thus called ambidextrous leadership. Ambidextrous leadership is the ability to foster both explorative and exploitative behaviours in followers by increasing or reducing variance in their behaviour and flexibly switching between those behaviours (Rosing et al., 2011). Ambidextrous leadership proposes interaction between two complementary leadership behaviours opening and closing behaviours. Opening leadership behaviours are defined as leader behaviours that increase variance in followers' behaviours by encouraging them to do things differently and experiment, giving followers room for independent thinking, and supporting followers' attempts to challenge the status quo. Opening leadership leads to follower explorative activities (Rosing et al., 2011). Closing leadership behaviour is defined as leader behaviour that reduces variance in follower behaviour by taking corrective actions, setting specific guidelines, and monitoring goal achievement. Closing leadership behaviours lead to follower exploitation activities (Rosing et al., 2011).

A previous study by Koryak et al. (2015) explores and synthesises the relationship between leadership, firm

dynamic capabilities, and firm performance. A previous study by Y. Lin & Wu (2014) concluded that there is a significant positive relationship between dynamic capabilities and firm performance in Taiwanese companies. Additionally, a study by Wamba et al. (2017) also concluded that dynamic capabilities have significant impact on firm performance. Studies done by Alghamdi (2018) also found that ambidextrous leadership has significant impact on performance.

Thus, this study develops hypotheses 2 and 3.

H2. Ambidextrous leadership has positive significant effects on dynamic capabilities.

H3. Ambidextrous leadership has positive significant effects on efficiency.

Work Professionalism

This study used work engagement as the foundation for work professionalism. Work engagement was developed by Kahn (1990). According to Kahn (1990), an engaged employee is an employee that is fully physically, cognitively, and emotionally connected with their work roles. Engaged employees are more likely to work harder through increased levels of discretionary effort than those who are disengaged (Bakker, 2011). One of the most often used definitions of work engagement is an active, positive work-related state that is characterised by vigour, dedication, and absorption (Bakker, 2011; Schaufeli, 2011). Previous studies by Salanova & Schaufeli (2008) concluded that work engagement has a significant impact on proactive behaviour. Personal dynamic capabilities were based on the view that dynamic capabilities can be understood as behavioural routines from the members of organisation. Thus, this study develops hypothesis 4.

H4. Work professionalism has positive significant effects on dynamic capabilities.

Previous studies by Bakker & Bal (2010), found that work engagement has a positive effect on job performance. Thus, this study develops hypothesis 5.

H5. Work professionalism has positive significant effects on Efficiency performance.

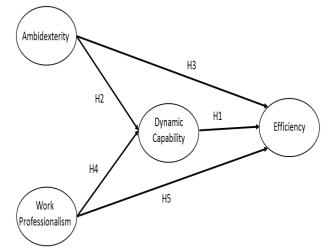


Figure 1 Framework for Description and Hypotheses

Research Methodology

All of the indicators in this study are developed or adapted from the existing literature and were translated into Bahasa/Indonesian language. All of the indicators are measured using a five-point Likert Scale. A pre-test was carried out to make sure of the readability of the questionnaires.

Operationalisation of Variables.

From the description related to the theoretical basis associated with the variables of work professionalism, ambidextrous leadership, dynamic capability, and efficiency mentioned above, they can be identified as construct factors in the operationalisation of variables.

Efficiency. Efficiency is the term on showing the organization to struggle with all available resources to meet various needs in a rapidly changing environment (Archer, 2010).

Dynamic Capability. Dynamic Capability is an organisation's capacity to create, extend, or modify its own resource based on a specific objective. Every worker adapts to the changing environment and the entrepreneurship spirit and are able to make quick and precise decisions (Helfat et all, 2009). Similarly, every worker must able to adapt to the changing environment, have an entrepreneurship spirit, and be able to make a quick and precise decision.

Work Professionalism. Work professionalism is defined as predispositions, feelings, emotions, or thoughts that uphold the ideals of the profession and serve as a basis professional behaviour in the work place. Work professionalism help the person to achieve the optimal results in every task and interaction (Hammer, 2000).

Ambidextrous leadership. Ambidextrous leadership has two dimensions: open leadership and closed leadership. Indicators for open leadership: Allows different ways of accomplishing a task, Encourages experimentation with different ideas (Schlinderf, 2016). Motives to take risks, Gives possibilities for independent thinking and acting, Gives room for own ideas, Allows errors, and Encourages error learning. Indicators for closed leadership: Monitors and controls goal attainment, Established routines, Takes corrective action, Controls adherence to rules, Pays attention to uniform task accomplishment, Sanctions errors, and Sticks to plans.

Data Collection Techniques.

Data was collected by questionnaire, which was sent to eight petroleum companies. There were 164 respondents: 60% male and 40% female. The age range (years old) from: 25-29: 16%, 30-39: 36%, 40-49: 33%, and 50-59: 15%. Background of education: bachelor 60%, master 38%, and doctorate 1%. Work experience (in years): < 1: 3%, 1-3: 9%, 3-5: 18%, 5-8: 20%, 8-10: 13%, 10-15: 10%, 15-20: 5%, and > 20: 22%.

Data Sampling Techniques.

Stratified random sampling was used to collect the data. This is a method of sampling that involves the division of a

population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics.

Result And Discussion

Data analysis in this paper was performed using covariancebased structural equation modeling (CB SEM) and was performed using LISREL 8.0. The covariance-based technique is chosen because: 1) the amount of data is adequate, and 2) according to Hsu, Chen, & Hsieh (2006), the covariance-based technique can have better prediction results compared to the component-based technique.

Measurement Validation

Confirmatory Factor Analysis (CFA) using LISREL 8.8 with Weighted Least Square (WLS) estimator was conducted to validate the research measurement model. Construct validity was checked with three indicators: 1) the factor loading of each indicator on their respective variable should be significant and the value higher than 0.50. 2) The construct reliability for adequate convergence or internal consistency should be higher than or at least equal to 0.70. 3) The average variance extracted (AVE) of each variable should higher than or equal to 0.50 (Chang & Fang, 2013; Hair et al., 2010).

Based on the indictors above, some adjustments were performed on our measurement model to meet the requirements, and some indicators were deleted. After these adjustments, all AVEs were well above 0.50. Table 1 shows that: 1) The smallest standardised factor loading is 0.73 and is higher than the critical value 0.5, 2) The lowest construct reliability is 0.835 and is higher than 0.70, 3) The lowest average variance extracted is 0.631 and is higher than 0.5. Therefore, all variables for the model have higher values than the critical values. Moreover, Table 2 shows that several GOFI (goodness of fit indices) for the measurement model also show that the model is good fit to the data

Table 1 Factor Loadings, AVE, and Composite	
Reliability	

Constructs	Manifest Variables	$ \begin{array}{c} \mathbf{SFL} \\ (\lambda \geq \\ 0.70) \end{array} $	AVE (> 0.5)	CR (> 0.7)
Dynamic Capability (CD)	CD1 CD3 CD4	0.78 0.81 0.84	0.657	0.851
Work Professionalism (WP)	WPK1 WPK2	0.90 0.91	0.819	0.901
Efficiency (EE)	EE1 EE2 EE3	0.73 0.91 0.73	0.631	0.835
Ambidextrous Leadership	AML1	0.92	0.776	0.874

(AML)	AML2	0.84	

Note: SFL=Standardise Factor Loading, CR=Construct Reliability, AVE=Average Variance Extracted

 Table 2 Goodness of Fit Indices (GOFI) for Measurement

 Model and Structural Model

					-
	RMSEA	NFI	CFI	GFI	
	< 0.08	>0.90	>0.90	>0.90	
Measurement	0.15	0.95	0.97	0.97	
Structural	0.19	0.91	0.94	0.96	

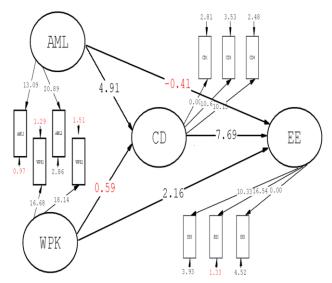


Figure 2: The Result of Research Model

Hypotheses Testing Results

Table 2 shows the goodness of fitness indices for the structural model does fit the data. Since ignoring the indirect effect may lead to considerable underestimation of the true total effect (Cavusoglu, 2012) and our study's final goal is to achieve efficiency using ambidextrous leadership and work professionalism, we will consider the total effect as part of the conclusion.

Table 3 Standardised Effects					
		CD	EE		
		Direct	Direct	Indirect	Total
Ambidextrous Leadership	g	0.58	-0.05	0.51	0.47
	t	4.91*	-0.41	4.28*	3.91*
Work Professionalism	g	0.07	0.18	0.06	0.24
	t	0.59	2.16*	0.59	2.28*
EE					
Dynamic Capability	β	0.89			
	t	7.69*			

Notes: * significant at p < .05

Table 3 and Figure 2 shows that the *t*-value of Dynamic Capability to Efficiency, Ambidextrous Leadership to Dynamic Capability, and Work Professionalism to Efficiency are larger than 1.97 (*t* table with significant level 0.05 and degree of freedom 163). This means that the hypotheses H1, H2, and H5 are supported. Table 2 and Figure 2 also show that the *t*-value of Ambidextrous Leadership to Efficiency, and Work Professionalism to Dynamic Capability are smaller than 1.97, meaning that hypotheses H3 and H4 are not supported.

Hypothesis H3 being rejected does not rule out a significant effect from Ambidextrous Leadership to Efficiency. From Table 3, we can see that *t*-value of the total effect of Ambidextrous Leadership to Efficiency is 3.91, which is higher than 1.97. This means ambidextrous leadership has a significant effect on efficiency.

The direct path coefficient value of Ambidextrous Leadership to Efficiency in this model is not significant (the direct effect), but the total effect is significant due to the full mediating of the Dynamic Capability variable. In a full mediation, the effect is taken over by the mediator. Therefore, in the presence of the mediator, the direct path connecting the intervention variable to the outcome variable is completely broken so that the intervention has no direct effect on the outcome variable (Gunzler, Chen, Wu, & Zhang, 2013; MacKinnon, Coxe, & Baraldi, 2012).

Conclusions

This study proves that ambidextrous leadership and work professionalism affect efficiency. This paper, within the theoretical perspective, elaborates the research models involving ambidextrous leadership and work professionalism as antecedents for the dynamic capability to achieve efficiency. Furthermore, the empirical study in this paper constitutes the empirical study on the petroleum industry, integrating the theory of dynamic capability. Dynamic capability (DC) is the capacity of an organisation that purposely creates, extends, or modifies its resource base to address rapidly changing environments (Helfat & Peteraf, 2009). The theory of DC in this study followed the bibliometric theory in strategic management (Vogel & Güttel, 2013). The empirical study and theoretical perspectives of DC are elaborated through Property Right Theory (PRT) of CA and Porter Generic Strategies, known as PGS (Bel, 2018) and Theory of Strategy as Processes and Practices, known as SAPP (Burgelman et al., 2018).

Based on the results, there are several managerial implications from this study. First, this research confirms that work professionalism affects efficiency, while ambidextrous leadership affects both dynamic capabilities through direct effect and efficiency through indirect effect. The total effect of ambidextrous leadership is significantly larger compared to efficiency. This insight will help firms, especially in HR departments in petroleum companies to equip their managers with ambidextrous leadership and work professionalism. More focus should be placed on ambidextrous leadership since ambidextrous leadership has larger effect on efficiency. There are several theoretical implications from this study. First, this study expanded the theory of ambidextrous leadership, efficiency, and work professionalism. Second, this study find that ambidextrous leadership have positive influence toward efficiency. Third, this study find that work professionalism have positive influence toward efficiency.

Limitation And Future Research

There are several limitations of this research that may limit the generalisability of this research. In this study, data is only taken from 12 companies which were all Indonesianbased. Future study may be broadened by examining companies from several countries as the subjects. This research focuses on a few personal traits, and future research may broaden the scope by adding more variables.

Acknowledgment.

I acknowledge my appreciation to Prof. Dr. Ir. Teddy Mantoro, Dr. Marcellino Pandin, Dr. Willy Gunadi, Dr. Asnan Furinto, Dr. Khristian Edi Nugroho, Dr. Wanda Wandoko, who have helped me to start thinking and writing this journal. Furthermore, I appreciate Mr. Ignatius Jonan, in his capacity as Minister of ESDM RI. Similarly, I convey my appreciation to SKK Migas who helped me in searching for the phenomena and collecting all questionnaires from petroleum companies in Indonesia.

References

- Achabal, D. D., Heineke, J. M., & McIntyre, S. H. (1984). Issu and Perspectives on Retail Productivity. Journal of Retailing, 60(3).
- [2] Alghamdi, F. (2018). Ambidextrous leadership, ambidextrous employee, and the interaction between ambidextrous leadership and employee innovative performance. Journal of Innovation and Entrepreneurship, 1–14. https://doi.org/10.1186/s13731-018-0081-8
- [3] Archer, T. S. (2010). The Efficiency Theory.
- [4] Bakker, A. B. (2011). An evidence-based model of work engagement. Current Directions in Psychological Science, 20(4), 265–269. https://doi.org/10.1177/096372141141453 4
- [5] Bakker, A. B., & Bal, P. M. (2010). Weekly work engagement and performance: A study among starting teachers. Journal of Occupational and Organizational Psychology, 83(1), 189–

206.

https://doi.org/10.1348/096317909X40259 6

- [6] Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, 17(1), 99–120. https://doi.org/10.1177/014920639101700 108
- [7] Bel, R. (2018). A property rights theory of competitive advantage. Strategic Management Journal, 39(6), 1678–1703. https://doi.org/10.1002/smj.2707
- [8] Burgelman, R. A., Floyd, S. W., Laamanen, T., Mantere, S., Vaara, E., & Whittington, R. (2018). Strategy processes and practices: Dialogues and intersections. Strategic Management Journal, 39(3), 531–558. https://doi.org/10.1002/smj.2741
- [9] Cavusoglu, N. (2012). LISREL growth model on direct and indirect effects using cross-country data. Economic Modelling, 29(6), 2362–2370. https://doi.org/10.1016/j.econmod.2012.05 .025
- [10] Chang, Y.-S., & Fang, S.-R. (2013). Antecedents and Distinctions Between Online Trust and Distrust: Predicting High- and Low-Risk Internet Behaviors. Journal of Electronic Commerce Research, 14(2), 149–167.
- [11] Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic Capabilities: What Are They? Strategic Management Journal Strat. Mgmt. J, 21, 1105–1121.
- [12] Gerybadze, A., Hommel, U., Reiners, H. W., & Thomaschewski, D. (2010). Innovation and international corporate growth. Innovation and International Corporate Growth, 1–452. https://doi.org/10.1007/978-3-642-10823-5
- [13] Gronroos, C., & Ojasalo, K. (2002). Service productivity Towards a conceptualization of the transformation of inputs into economic results in services. Journal of Business Research, 5703, 1–10.
- [14] Gunzler, D., Chen, T., Wu, P., & Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling.

Shanghai Archives of Psychiatry, 25(6), 390–394. https://doi.org/10.3969/j.issn.1002-0829.2013.06.009

- [15] Hair, J. F., Anderson, R. E., Tatham, R. L., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate Data Analysis. Pearson Prentice Hall (7th ed.). Pearson. https://doi.org/10.1016/j.ijpharm.2011.02. 019
- [16] Hammer, D. P. (2000). Professional attitudes and behaviors: the" A's and B's" of professionalism. American Journal of Pharmaceutical Education, 64(4), 455.
- [17] Helfat, C. E., & Peteraf, M. A. (2009). Understanding dynamic capabilities: Progress along a developmental path. Strategic Organization, 7(1), 91–102. https://doi.org/10.1177/147612700810013 3
- [18] Hsu, S.-H., Chen, W., & Hsieh, M. (2006). Robustness testing of PLS, LISREL, EQS and ANN-based SEM for measuring customer satisfaction. Total Quality Management & Business Excellence, 17(3), 355–372. https://doi.org/10.1080/147833605004514 65
- [19] Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. Academy of Management Journal, 33(4), 692–724. https://doi.org/10.5465/256287
- [20] Koryak, O., Mole, K. F., Lockett, A., Hayton, J. C., Ucbasaran, D., & Hodgkinson, G. P. (2015). Entrepreneurial leadership, capabilities and firm growth. International Small Business Journal: Researching Entrepreneurship, 33(1), 89– 105. https://doi.org/10.1177/026624261455831

5

[21] Lin, K.-W., & Kai-Ping, H. (2012).
Dynamic Capability and Its Effects on Firm Performance. American Journal of Applied Sciences, 9(1), 107–110. https://doi.org/10.3844/ajassp.2012.107.11 0

- [22] Lin, Y., & Wu, L. Y. (2014). Exploring the role of dynamic capabilities in firm performance under the resource-based view framework. Journal of Business Research, 67(3), 407–413. https://doi.org/10.1016/j.jbusres.2012.12.0 19
- [23] MacKinnon, D. P., Coxe, S., & Baraldi, A. N. (2012). Guidelines for the Investigation of Mediating Variables in Business Research. Journal of Business and Psychology, 27(1), 1–14. https://doi.org/10.1007/s10869-011-9248-z
- [24] Pervan, M., Curak, M., & Pavic Kramaric, T. (2017). The Influence of Industry Characteristics and Dynamic Capabilities on Firms' Profitability. International Journal of Financial Studies, 6(1), 4. https://doi.org/10.3390/ijfs6010004
- [25] Protogerou, A., Caloghirou, Y., & Lioukas, S. (2012). Dynamic capabilities and their indirect impact on firm performance. Industrial and Corporate Change, 21(3), 615–647. https://doi.org/10.1093/icc/dtr049
- [26] PWC. (2018). Oil and Gas in Indonesia. Taxation.
- [27] Raisch, S., & Birkinshaw, J. (2008). Organizational ambidexterity: Antecedents, outcomes, and moderators. Journal of Management, 34(3), 375–409. https://doi.org/10.1177/014920630831605 8
- [28] Rosing, K., Frese, M., & Bausch, A.
 (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. Leadership Quarterly, 22(5), 956–974. https://doi.org/10.1016/j.leaqua.2011.07.0 14
- [29] Salanova, M., & Schaufeli, W. B. (2008). cross-national study of work Α engagement as a mediator between job proactive behaviour. resources and International Journal of Human Resource Management, 19(1), 116-131. https://doi.org/10.1080/095851907017639 82

- [30] Schaufeli, W. B. (2011). Work Engagement : A Key Concept of a Positive Occupational Health Psychology ?
- [31] Schindler, Anna. Ambidextrous Leadership - The Role of Opening and Closing Leadership Behaviors for Team Innovative Outcome in The Case of Management Consultancies. Master Thesis.University of Twente.
- [32] Sukamana, Yoga (2016). Minyak Indonesia Habis 12 Tahun Lagi, Krisis Mengintai Anak dan Cucu. https://ekonomi.kompas.com/read/2016/12 /02/183000526/minyak.indonesia.habis.12. tahun.lagi.krisis.mengintai.anak.dan.cucu.
- [33] Teece, D. J. (2007). EXPLICATING DYNAMIC CAPABILITIES: THE NATURE AND MICROFOUNDATIONS OF (SUSTAINABLE) ENTERPRISE PERFORMANCE. Strategic Management Journal, 28. https://doi.org/10.1002/smj
- [34] Teece, D., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z
- [35] Vogel, R., & Güttel, W. H. (2013). The dynamic capability view in strategic management: A bibliometric review. International Journal of Management Reviews, 15(4), 426–446. https://doi.org/10.1111/ijmr.12000
- [36] Wamba, S. F., Gunasekaran, A., Akter, S., Ji, S., Ren, -Fan, & Dubey, R. (2017). Big data analytics and firm performance: effects of dynamic capabilities. Journal of Business Research, 70, 356–365. Retrieved from http://ro.uow.edu.au/cgi/viewcontent.cgi?a rticle=1983&context=buspapers
- [37] Wieczorek, A., & Mitrega, M. (2017).
 Personal Dynamic Capabilities in the Context of a Corporate Success.
 Dubrovnik International Economic Meeting, 545–551. Retrieved from hrcak.srce.hr/187410

[38] Wong, W.-P., Soh, K.-L., Chong, C.-L., & Karia, N. (2012). Logistics firms performance: Efficiency and effectiveness perspectives 1. International Journal of Productivity and Performance Management, 61(9), 940–948. Retrieved from https://doi.org/10.1108/174104012112771 65