Pro-Growth Absorptive Strategy, Innovation Performance, And Business Performance Of Commercial Banks In Indonesia

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Abstract - This study is to examine the effect of pro-growth absorptive strategy and innovation performance, and how innovation performance mediates the effect. The data sources were primary and secondary data obtained from the questionnaire and the Financial Services Authority (Otoritas Jasa Keuangan/OJK) of Indonesia in 2019 related to 57 commercial banks under study. Component-based Partial Least Square (PLS) was used to analyze obtained data through two stages of evaluation model (outer and inner) to test the causal relationship among variables. We found that the pro-growth absorptive strategy has a positive and significant effect on innovation performance and business performance. Innovation performance has a positive and significant effect on business performance. Innovation performance mediates the effect of pro-growth absorptive strategy on business performance, but it is the partial mediating. The main implication of the study is that to maintain and improve business performance, the banks first have to focus on pro-growth absorptive strategy to initiate the implementation of innovation performance.

Keywords: business performance, innovation performance, pro-growth absorptive strategy, commercial banks

1. INTRODUCTION

The banking sector plays a salient role in promoting national economic growth. A commercial bank, as a financial services institution, should become a trustworthy institution that protects the interests of consumers and the public, and be able to bring about the institution as a pillar of the national economy with global competitiveness and capability to promote public prosperity. It also has to realize the convening of all activities in the financial sector so that they are managed regularly, fairly, transparently, and accountably. Besides that, the commercial bank must accomplish a sustainable and stable financial system, and protect the interests of consumers and the public.

The contribution of commercial banks, in general, reflects their business performance (financial and non-financial performances). The Financial Services Authority (*Otoritas Jasa Keuangan/OJK*) of Indonesia in 2019 announced that the banking industry, especially the commercial banks, tend to achieve positive performance. The net profit of commercial banks per October 2019 grew 6.05% year-on-year (y-o-y) to Rp 130.77 trillion, but this growth is worse than last year's performance. The distribution of bank credit grew by 6.08% (y-o-y), but this figure is smaller than the previous year (11.75% y-o-y).Banking credit growth was supported by the construction sector and the household sector. The banking gross Non-performing Loan (NPL) ratio is relatively low compared to the banking capital adequacy ratio (CAR), which is far above the threshold. On the other hand, commercial banks are committed to providing affordable funding. This can be seen from the decreased Net Interest Margin (NIM) and the decline in average bank credit interest rates. Considering this situation,

however, if in 2019 the banking industry grows to slow down, it is estimated that by 2020 the banking industry will enter a slowdown phase in national economic growth as in 2016 (Gunawan, 2019).

To improve financial performance, commercial banks undeniably have to exploit nonfinancial performance. Following the concept of Balanced Scorecard (Kaplan & Norton, 2008), the company strategies have to be embedded with the operation for competitive advantage, to balance the financial and non-financial performance, short- and long-term performance, as well as internal and external performance. To evaluate banks performance, financial performance and non-financial performance aspects should be taken into account (Seçme, Bayrakdaroğlu, &Kahraman, 2009).

Successful business performance requires banks to manage external knowledge into internal knowledge. This process can be pursued through the pro-growth absorptive strategy so the banks may acquire, assimilate, transform, and exploit that knowledge. This pro-growth absorptive strategy enables an organization to obtain a higher level of competitiveness and innovation (Chirico, 2008). Barney (2007) argues that knowledge leads to performance improvement when it is well managed.

Technological advances require commercial banks to innovate, especially in integration between digital technology and business strategy (Prajogo&Sohal, 2006) to achieve better competitive advantages and business performance. The acquired knowledge then may be applied to generate ideas into new products and services that meet and satisfy the needs and expectations of the banks' customers. The pro-growth absorptive strategy that pays attention to the development of innovation performance should have a better business performance.

The effect of pro-growth absorptive strategy on innovation performance has been studied by several researchers, such as Ernst & Center (2018), Bratti& Felice (2009), and Chen, Lin, & Chang (2009), ranging from the smallest to the largest levels of an organization. The effect of innovation performance on business performance has been examined by previous researchers, such as Löfsten (2014), Nolsøe-Grünbaum& Stenger (2013); and Wagner (2010). Some previous researchers scrutinized the mediating effect of innovation performance, such as Nawaz, Hassan & Shaukat (2014), Byukusenge, Munene, &Orobia(2016); and Lee, Dedahanov, & Rhee (2015).

This study is to examine the effect of pro-growth absorptive strategy on business performance of commercial banks with innovation performance as a mediating effect. This study argues that commercial banks should exert efforts to implement a pro-growth absorptive strategy to improve business performance through increased innovation performance. This paper may contribute to the field of strategic management, especially to understand the implication of innovation performance in the association between pro-growth absorptive strategy and business performance of the commercial banks.

2. LITERATURE REVIEWS
2.1 Pro-Growth Absorptive Strategy
The pro-growth absorptive strategy is an important part of a corporate strategy formulation in its core business. To improve its competitive position, the business strategy of a business unit must have an orientation toward growth (pro-growth strategy). A company that focuses more on pro-growth strategy is usually less focused on pro-profit strategy, and vice versa (Han, 2007). The pro-profit strategy deals with most of the short-term financial performance, while the pro-growth strategy deals with most of the non-financial performance. To execute long-term pro-profit strategy, a company should be able to cope with the pro-growth strategy.

In strategic management, a company should identify the external and internal factors that influence its performance. Knowledge is one of the valuable resources in addition to assets, skills, and competencies in the internal environment of the company. Following the organizational learning theory,Wheelen& Hunger (2012), "*an organization adjusts defensively to a changing environment and uses knowledge offensively to improve the fit between itself and its environment*". Quick adaptation to the dynamic environments, a company needs to involve in a learning organization, that skilled at creating, acquiring, and transferring knowledge and at modifying its behaviour to reflect new meaningful knowledge. Knowledge is a strategic resourcethat is essential to a firm's ability to innovate and compete (Wang, 2013). The company may reuse existing knowledge and explore new knowledge (Simsek et al, 2009).

To get there, a company needs a strategy that can absorb external knowledge for the long-term benefit of the company, which is called a pro-growth absorptive strategy. Pro-growth absorptive strategy in this sense refers to the absorptive capacity of a firm's ability to value, assimilate, and utilize new external knowledge (Wheelen& Hunger, 2012).A company may learn from external knowledge through the processes of knowledge identification, assimilation, and exploitation (Cohen & Levinthal, 1989). Afterwards, Kim (1998) proposed that a company should incorporate in knowledge acquisition, assimilation, transformation, and development processes. The previous concept was modified by Zahra& George(2002)in new terms: knowledge acquisition, assimilation, transformation, and exploitation that embedded within company routines and strategic processes.

Xie, Zou,& Qi (2018) explained that knowledge acquisition is related to the ability to identify and acquire externally generated knowledge important to a company's operations. Knowledge assimilation deals with the routines and processes that allow a company to analyze, interpret, and understand information obtained from external sources. Knowledge transformation indicates the ability to develop and refine the routines that facilitate combining existing knowledge and newly acquired and assimilated knowledge. Finally, knowledge exploitation is the ability to incorporate and utilize the acquired, assimilated, and transformed knowledge into the operations and routines. In turn, the right absorptive strategy implemented by a company can overcome problems, which allows the company to create new operations, competencies, and routines so that it can manage the knowledge into profit. This study adopted the concept of knowledge absorptive capacity as the base of a pro-growth absorptive strategy.

2.2 Innovation Performance
In business and economics, innovation is one of the processes of creating value. Innovation deals with breakthrough and novel solutions to crucial problems. In turn, successful innovation meets new requirements, unarticulated needs, or existing market needs, and it leads to better company performance. Innovation process in an organization must be applied consistently and successfully (El-Bassiti, 2016). Identification of factors that support and hinder innovation is a necessity to implement the intended innovation (Otieno et al, 2016).

The foremost global source of innovation types in an organization refers to the Oslo Manual (OECD, 2005): product (good and service) innovations, process innovation (production and delivery method), organizational innovations, and marketing innovation. The advancement of innovation may come from unique and different approaches by reinventing the newness through innovative capability (Fiorentino, 2010), as important factors of competitiveness.

In-service activities, such as commercial banks, it is increasingly necessary to measure innovation performance. Zizlavsky (2016) defines innovation performance as "the ability to

transform innovation inputs into outputs, and thus the ability to transform innovation capability and effort into market implementation". To improve reliability, adoption, and usability for various actors involved in developing innovation, there is a deliberate set of guiding principles to consider innovation performance specifications (Xiao & Ramsden, 2016), such as accuracy, benefit, consistency, flexibility, informativeness, and speciality. According to Albaladejo& Romijn (2001), the seven supporting factors to be measured in innovation performance in an organization are (1) human resource capability, (2) technology utilization, (3) interaction with external parties, (4) marketing capability, (5) new product development, (6) production and operational capabilities, and (7) research and development (R&D). This measurement is used as indicators of innovation performance in this study.

2.3 Business Performance
Measurement of business performance is needed periodically and continuously to find out whether the strategies implemented in the business are running well or meet the conditions of external dynamics as running. Business performance is a concept that is used to assess the achievement of business activities. Performance is simply the end of result of activities, which includes the outcome of the strategic management process (Wheelen& Hunger, 2012). Nevertheless, performance is commonly considered as a complex multi-dimensional construct (Chakravarthy, 1997).

Periodic performance measurement is required by every organization, both profit-oriented, and nonprofit oriented organizations. The measurement results will be useful as a basis for planning. Besides, the organization becomes more aware of the internal and external conditions of the organization. Then, it can identify strengths, weaknesses, opportunities, and threats faced, and can also ensure the critical factors that require immediate response, so no fatal consequences arise. Furthermore, superior business performance can also strengthen the resources and capabilities of the organization, through reinvestment, improvement, and upgrading.

According to Jaworski & Kohli (1993), business performance can be measured by financial performance and market performance. In line with this opinion, Deshpandé, Farley & Webster (1993) stated that business performance is measured by profitability, company size, market share, and sales growth. Later on, Kaplan & Norton (2008) introduced the concept of a balanced scorecard to measure business performance using four perspectives. Each measurement has advantages and disadvantages. Thus, this study attempts to combine the measurement of business performance using the indicators of Product/Sales, Customers, Profitability, and Market Share.

2.4 Conceptual Framework and Hypotheses
Many previous studies have examined the direct and indirect effects of pro-growth absorptive strategy (PAS) on innovation performance (IP) and business performance (BP), such as Florini, Lai, & Tan (2012); Montinari & Rochlitz (2014); Cooke (2013); Castillo, Salem, &Guasch (2012); Kneller & Stevens (2006); and Cohen & Levinthal (1990). Based on the previous researches on literature reviews and adjustment to the conditions of commercial banks in Indonesia, we propose four hypotheses as follows.

H_1:   *Pro-growth absorptive strategyhas a positive effect on innovation performance.*

H_2:   *Pro-growth absorptive strategyhas a positive effect on business performance.*

H_3:   *Innovation performance has a positive effect on business performance.*

H$_4$:   *Innovation performance has a mediating effect on the relationship betweenpro-growth absorptive strategyand business performance.*

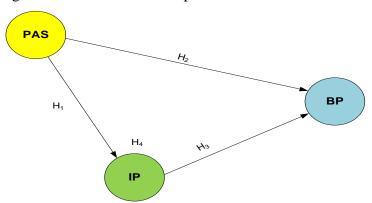Figure 1 illustrates the conceptual framework of the model.

Figure 1 Conceptual Framework of the Model

3. RESEARCH METHOD

There are 120 commercial banks in Indonesia (4 state-owned banks and 116 private banks).Of those banks, there are 26 regional-owned banks and 29 Islamic banks that were not included in this study. Thus, this study was intended to investigate 65 commercial banks. Nevertheless, there were 8 private banks which have no data available related to profitability in 2019. The final data, then, were obtained from 57 banks. To obtain the data, we administer a set of questionnaires to the 57 managers of the commercial banks about the pro-growth absorptive strategy and innovation performance (scale 1 to 10); and business performance (scale 0 to 100) for the indicators of product/sales, customers, and market share. In particular, the indicators of profitability of the business performance were the secondary data obtained from OJK (https://www.ojk.go.id/) in 2019, including the CAR (Capital Adequacy Ratio), ROA (Return On Assets), LDR (Loan to Deposits Ratio), and Net Interest Margin (NIM).

First, we described each variable in terms of mean and standard deviation. Secondly, to analyze the effect of pro-growth absorptive strategy (PAS) as an exogenous variable on innovation performance (IP) as mediating variable and business performance (BP) as an endogenous variable, we used Partial Least Square (PLS). The constructs of each latent variable are:

•   Pro-growth Absorptive Strategy (PAS) is a latent exogenous variable with four manifest variables: Acquisition (PAS1), Assimilation (PAS2), Transformation (PAS3), and Exploitation (PAS4), measured by several indicators.

•   Innovation Performance (IP) is a latent endogenous variable, as well as the mediating variable, with seven manifest variables: Human Resource Capability (IP1), Technology Use (IP2), Interaction and Communication with External Parties (IP3), Marketing Capability (IP4), New Product Development (IP5), Production &Operational Capabilities (IP6), and Research &Development (IP7), measured by several indicators.

•   Business Performance (BP) is a latent endogenous variable with four manifest variables: Product/Sales (BP1), Customers (BP2), Profitability (BP3), and Market Share (BP4), measured by several indicators.

Component-based Partial Least Square (PLS) was used to analyze obtained data through two stages of evaluation model (outer and inner). The first stage is evaluating the outer model or the measurement model to determine the validity of outer loading (valid if the outer loading >

0.5 and ideally > 0.7). The composite reliability (CR) is valid if > 0.7, Cronbach's Alpha is valid if > 0.7, and average variance extracted (AVE) is valid if > 0.5, as a minimum 50% of measurement variance captured by the latent variables. The second stage is the inner or structural model that examines the latent variable correlations, path coefficients and t-statistic values, R-squared (R^2) values, and effect size (f^2). This model also calculates the mediating effect of innovation performance.

4. RESULTS AND DISCUSSION

The data set contains many different manifests of each latent variable. Table 1 presents the description for each variable in terms of mean and standard deviation.

Table 1   Description of Variables

Variables	Mean	Std. Dev.
Pro-growth Absorptive Strategy (PAS)		
PAS1: Acquisition	7.246	0.673
PAS2: Assimilation	7.368	0.707
PAS3: Transformation	7.298	0.740
PAS4: Exploitation	7.298	0.808
Innovation Performance (IP)		
IP1: Human Resource Capability	7.105	0.696
IP2: Technology Use	7.307	0.680
IP3: Interaction and Communication with External Parties	7.202	0.654
IP4: Marketing Capability	7.237	0.682
IP5: New Product Development	7.167	0.594
IP6: Production & Operational Capabilities	7.193	0.702
IP7: Research & Development	7.158	0.858
Business Performance (BP)		
BP1: Product/Sales	78.316	6.761
BP2: Customers	80.205	6.028
BP3: Profitability		
CAR	24.562	12.417
ROA	1.199	1.340
LDR	115.773	162.798
NIM	4.379	2.409
BP4: Market Share	77.684	5.612

To test the hypotheses, the analysis of PLS was used (measurement and structural model). The summary of the measurement model of each variable is summarized in Table 2.

Table 2   Measurement Model of Variables

Latent/Manifest Variables		Loadings	Composite Reliability	Average Variance Extracted	Cronbach's Alpha	Goodness of Fit
PAS	PAS1	0.787	0.865	0.618	0.802	Fit Model
	PAS2	0.768				
	PAS3	0.885				
	PAS4	0.694				
IP	IP1	0.708	0.887	0.530	0.857	Fit Model
	IP2	0.694				

Latent/Manifest Variables		Loadings	Composite Reliability	Average Variance Extracted	Cronbach's Alpha	Goodness of Fit
	IP3	0.732				
	IP4	0.798				
	IP5	0.668				
	IP6	0.710				
	IP7	0.776				
BP	BP1	0.769	0.849	0.585	0.777	Fit Model
	BP2	0.818				
	BP3	0.656				
	BP4	0.806				

The Cronbach's alpha value > 0.6 or ideally > 0.7 and composite reliability scores > 0.7 are the thresholds value for a fit model (Rahman et al., 2013), and AVE should be higher than 0.5. Table 2 shows that the loadings of all manifest variables are higher than 0.6 which is valid. The values of Composite Reliability and Cronbach's Alpha are higher than 0.7, and the value of AVE is higher than 0.5 which confirms the discriminant validity of the manifests in the model. In short, the constructs in the measurement model are confirmed as valid and reliable.

Table 2 also explains that all manifest variables have high loadings. In Pro-growth Absorptive Strategy, Transformation (PAS3) is the highest factor loading that shares the highest proportion of variance. It means that the transformation stage is the most prominent factor in shaping the commercial banks' Pro-growth Absorptive Strategy, through the development of knowledge that fits the needs of the bank and through the combining of the old and new knowledge. Most commercial banks reflect this stage to establish the absorptive capacity. The acquisition of knowledge is also important to attain by the intensification to identify and obtain external knowledge. After getting the external knowledge, the banks can better understand external knowledge and communicate the knowledge needed to the internal organization. Nevertheless, the exploitation stage is not so high compared to other factors.

The highest factor loading in Innovation Performance is Marketing Capability (IP4). In this way, most commercial banks have successfully evaluated banking products/services and introduced new products/services to customers. Essentially, most banks have also effectively conducted research and development (R&D) to strengthen the identification of market segments and network expansion. The banks have intensively collaborated with third parties and partnerships with customers. Besides that, the banks have adequately tried to innovate products/services that meet customer needs and supervise the quality of products/services. This condition is supported by relatively high human resource capabilities in innovation and creativity. Human resource capabilities support banks in building prospective business networks and marketing products/services online. Nevertheless, the level of achievement of developing superior and new products/services is not as high as other factors, so banks need to further evaluate this achievement.

In Business Performance, the lowest factor loading is profitability (BP2) compared to other factors. This is mostly due to the high variability in terms of CAR, ROA, LDR, and NIM of each bank. The highest banks' performance is reflected by the customer-aspect concerning the average number of customer growth, number of credit recipients, and customer satisfaction index compared to the previous year period. The banks consider that the level of exploiting market opportunities and the success rate of market development is gradually

increasing. It was stated that the percentage of the development of new products/services and the customer deposit growth has been quite satisfying.

To evaluate the inner structural model, we examine the path coefficient (β value), t-statistic value, R-squared (R^2) values, and effect size (f^2) of the model. The structural model is illustrated in Figure 2.
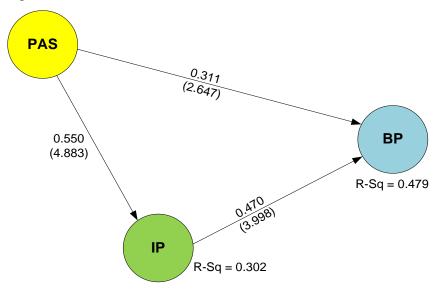

Figure 2 Structural Model

The calculation of the path coefficient and t-statistic value is presented in Table 3 as follows.

Table 3   Path coefficient and t-statistic value

Hypothetical paths	Original Sample (O)	Standard Error (SE)	t-statistic ($|O/SE|$)	Inference
PAS – IP (H_1)	0.550	0.113	4.883	Significant
PAS – BP (H_2)	0.311	0.118	2.647	Significant
IP – BP (H_3)	0.470	0.118	7.826	Significant

The path coefficient of PAS – IP is significant with □ = 0.550 and t-value = 4.883 (table value is 2.00 at 5% level of significance). This indicates that a 100 point change in PAS will bring about 55.0 point change in IP. It implies that the pro-growth absorptive strategy has a direct positive significant effect on innovation performance. The significance of PAS – BP and IP – BP indicates that pro-growth absorptive strategy has a positive significant effect (directly and indirectly) on business performance and that innovation performance has a direct positive significant effect on business performance.

In PLS path models, the squared correlation values of 0.67, 0.33 and 0.19 are considered as substantial, moderate and weak respectively (Chin, 1998). The R^2 value of the first latent endogenous construct (R^2_{IP}) as shown in Figure 1 is 0.302, which is between 0.19 and 0.33 so it is considered as weak to moderate. The R^2 value of the second latent endogenous construct (R^2_{BP}) is 0.479, which is considered as moderate to substantial (between 0.33 and 0.67).

The effect size (f^2) is a measure of the impact of each predictor construct on the dependent construct. The effect of predictor independent construct is large at the structural level if f^2 is 0.35, medium if 0.15 and small if 0.02 (Cohen 1988). The results and inference of the effect size are tabulated in Table 4.

Table 4   Effect Size (f^2)

Dependent construct	Independent construct	R^2 (included)	R^2 (excluded)	Effect Size	Inference
IP	PAS	0.302	0	0.434	Large effect
BP	PAS	0.479	0.325	0.296	Medium to large effect
BP	IP	0.479	0.411	0.130	Small to medium effect

To test Hypothesis 4: "*Innovation performance has a mediating effect on the relationship of pro-growth absorptive strategyand business performance*", we calculate the mediating effect of IP since PAS has a direct and indirect effect on BP. The result of the mediating effect in the path model is presented in Table 5.

Table 5   Mediating effects of Innovation Performance

Construct	Mediating construct	Direct effect (DE)	Indirect effect (IE)	Total Effect (TE)	Mediating effect
PAS → IP	-	0.550	0	0.550	-
PAS → BP	IP	0.311	0.259	0.570	Partial mediating
IP → BP	-	0.470	0	0.470	-

Based on the calculation, this mediating effect of IP can strengthen the effect of PAS on BP. The indirect effect of PAS on BP through IP is smaller than its direct effect. In this model, innovation performance can be a partial mediating variable for the pro-growth absorptive strategy to intensify business performance. In other words, the pro-growth absorptive strategy may behave as an important factor in the business performance of the commercial banks, and its contribution will be slightly better if it is through innovation performance.

The empirical settings of commercial banks in Indonesia prove that the pro-growth absorptive strategy is important to initiate and implement innovation performance. This finding supports the research of Xie, Zou, & Qi (2018) that the strategy to absorb and utilize the knowledge has become an important process necessary for a firm to identify market opportunities and use new knowledge to realize innovation. In short, the pro-growth strategy must be in alignment with innovation performance to achieve better business performance.

The mediating effect of innovation performance proves that the pro-growth strategy will have more influence on business performance. The findings of this study then confirm the previous studies related to the interrelation of pro-growth absorptive strategy, innovation performance, and business performance (Florini, Lai, & Tan, 2012; Montinari & Rochlitz, 2014; Cooke, 2013; Castillo, Salem, & Guasch, 2012; Kneller & Stevens, 2006; and Cohen & Levinthal, 1990). It is also found that the banks must first stabilize the position of the financial aspects before initiate the pro-growth strategy and implement innovation performance.

5. CONCLUSION

The present study depicts the positive effect of pro-growth absorptive strategy and innovation performance on the business performance of commercial banks. This empirical study found that: (a) pro-growth absorptive strategy has a positive effect on innovation performance, (b) pro-growth absorptive strategy has a positive effect on business performance, (c) innovation performance has a positive effect on business performance, and (d) pro-growth absorptive

strategy may affect business performance directly and indirectly through innovation performance.

There are several managerial implications of this study. To maintain and improve business performance, the banks first have to focus on pro-growth absorptive strategy to initiate the implementation of innovation performance. To uplift the innovation performance, the managers of the banks should address to the exploitation stage in pro-growth absorptive strategy so that the employees can more intensively utilize knowledge in day-to-day operations and in creating new competencies needed by banks.To enhance business performance, especially in profitability, the managers need to periodically plan, implement, and evaluate the progress of developing new and excellent products/services.

This study may provide a broader understanding in terms of implementing strategies and their effects on the innovation and performance of a specific type of commercial banks (without including regional-owned banks and Islamic banks), which can be further validated in these other types of banks. Future research can analyze other types of banks and involve other factors such as knowledge sharing, as well as internal and external environments.

6. REFERENCES

[1]   Albaladejo, M., &Romijn, H. (2001). Determinants of innovation capability in small UK firms. ECIS working paper No. 00.13.

[2]   Barney, J. (2007). Gaining and sustaining competitive advantage (3rd ed.). Upper Saddle River: Pearson Education.

[3]   Bratti, M., & Felice, G. (2009). Export and product innovation at the firm level. MPRA Paper, 18915.

[4]   Byukusenge, E., Munene, J., &Orobia, L. (2016). Knowledge management and business performance: mediating effect of innovation. Journal of Business and Management Sciences, 4(4), 82-92.

[5]   Castillo L., Salem D., Guasch J. (2012), Innovative and Absorptive Capacity of International Knowledge, Policy Research Working Paper No. 5931, The World Bank, Washington

[6]   Chakravarthy, B. (1997). A new strategy framework for coping with turbulence. MIT Sloan Management Review, 38(2), 69.

[7]   Chen, Y. S., Lin, M. J. J., & Chang, C. H. (2009). The positive effects of relationship learning and absorptive capacity on innovation performance and competitive advantage in industrial markets. Industrial marketing management, 38(2), 152-158.

[8]   Chin, W. W. (1998). The partial least squares approach to structural equation modeling. Mahwah, New Jersey: Lawrence Erlbaum Associates.

[9]   Chirico, F. (2008). Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal, 26, 433–462.

[10] Cohen, J. (1988). The effect size index: d. Statistical power analysis for the behavioral sciences, 2, 284-288.

[11] Cohen, W. M.&Levinthal, D. A.(1990). Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly* ,35(1), 128-152.

[12] Cohen, W. M., & Levinthal, D. A. (1989). Innovation and learning: The two faces of R & D. The Economic Journal, 99(397), 569-596.

[13] Cooke, P. (2013). Transition regions: green innovation and economic development. In Cooperation, clusters, and knowledge transfer (pp. 105-125). Springer, Berlin, Heidelberg.

[14] Deshpandé, R., Farley, J. U., & Webster Jr, F. E. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. Journal of marketing, 57(1), 23-37.

[15] El-Bassiti, L. (2016). Continuous Performance Improvement of Innovation : Bridging the Gap between Creativity and Measurement. In International Business Information Management Conference (28th IBIMA) (pp. 4248–4262). Spain.

[16] Ernst, D., & Center, E. W. (2018). Beyond Value Capture—Exploring Innovation Gains from Global Networks. Megaregionalism 2.0: Trade and Innovation Within Global Networks, (67), 55.

[17] Fiorentino, R. (2010). Performance measurement in strategic changes. In M.J Epstein, J.-F. Manzoni, &A. Davila (Eds.), Performance Measurement and management control: Innovative Concepts and practise (pp. 253–283), Bingley: Emerald Group Publishing Limited.10.1108/smfa.

[18] Florini A., Lai H., Tan Y. (2012), China Experiments: From Local Innovations to National Reform. Washington: Brookings Institution.

[19] Gunawan, A. (2019). Industri PerbankanTumbuhMelambat di 2019. CNBC Indonesia

[20] Han, M. (2007). Achieving superior internationalization through strategic ambidexterity. Journal of Enterprising Culture, 15(01), 43-77.

[21] Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. Journal of marketing, 57(3), 53-70.

[22] Kaplan, R. S., & Norton, D. P. (2008). The execution premium: Linking strategy to operations for competitive advantage. Harvard Business Press.

[23] Kim, L. (1998). Crisis construction and organizational learning: Capability building in catching-up at Hyundai Motor. Organization Science, 9(4), 506–521.

[24] Kneller R., Stevens P. (2006), Frontier Technology and Absorptive Capacity: Evidence from OECD Manufacturing Industries, Oxford Bulletin of Economics and Statistics, 68(1), 1-21.

[25] Kuhn, J. S., &Marisck, V. J. (2010). Action learning for strategic innovation in mature organizations: Key cognitive, design and contextual considerations. Action Learning: Research and Practice, 2, 27–48.

[26] Lee, D. H., Dedahanov, A. T., & Rhee, J. (2015). Moderating role of external networks and mediating effect of innovation performance on the relationship between technology orientation and firm performance. Asian Journal of Technology Innovation, 23(3), 321-334.

[27] Löfsten, H. (2014), Product innovation processes and the trade-off between product innovation performance and business performance. European Journal of Innovation Management, 17(1), 61-84.

[28] Montinari, L., &Rochlitz, M. (2014). Absorptive capacity compared: evidence from sectoral data of oecd, Asian and Latin American countries. Applied Econometrics and International Development, 14(2), 25-46.

[29] Munir, M. (2019). Analisis Pengaruh CAR, NPF, FDR dan InflasiterhadapProfitabilitasPerbankan Syariah di Indonesia. Ihtifaz: Journal of Islamic Economics, Finance, and Banking, 1(2), 89-98.

[30] Nawaz, M. S., Hassan, M., & Shaukat, S. (2014). Impact of knowledge management practices on firm performance: Testing the mediation role of innovation in themanufacturing sector of Pakistan. Pakistan Journal ofCommerce and Social Sciences, 8, 99-111.

[31] Nolsøe-Grünbaum, N., & Stenger, M. (2013). Dynamic capabilities: do they lead to innovation performance and profitability?. IUP Journal of Business Strategy, 10(4).

[32] OECD. (2005). Oslo manual - guidelines for collecting and interpreting innovation data. Paris: OECD Publishing.

[33] Otieno, O. C., Liyala, S., Odongo, B. C., & Abeka, S. (2016). Theory of Reasoned Action as an Underpinning to Technological Innovation Adoption Studies. World Journal of Computer Application and Technology, 4(1), 1–7.

[34] Prajogo, D. I., &Sohal, A. S. (2006). The integration of TQM and technology/R&D management in determining quality and innovation performance. Omega, 34(3), 296-312.

[35] Putri, A. D., & Dewi, A. S. (2019). Pengaruh Good Corporate Governance Dan Leverage Terhadap Kinerja Keuangan Pada Perbankan Yang Terdaftar Di BEI.

[36] Rahman I A, Memon A H, Abdul Azis, A A& Abdullah N H. (2013). Modeling causes of cost overrun in large construction projects with partial least square-SEM approach: Contractor's perspective. Res. J. Appl. Sci. Eng. Technol. 5(6): 1963–1972.

[37] Seçme, N. Y., Bayrakdaroğlu, A., &Kahraman, C. (2009). Fuzzy performance evaluation in Turkish banking sector using analytic hierarchy process and TOPSIS. Expert systems with applications, 36(9), 11699-11709.

[38] Simsek, Z., Heavey, C., Veiga, J. F., & Souder, D. (2009). A typology for aligning organizational ambidexterity's conceptualizations, antecedents, and outcomes. Journal of Management Studies, 46(5), 864-894.

[39] Wagner, S. M. (2010). Supplier traits for better customer firm innovation performance. Industrial Marketing Management, 39(7), 1139-1149.

[40] Wang, X. (2013). Forming mechanisms and structures of a knowledge transfer network: Theoretical and simulation research. Journal of Knowledge Management, 17(2), 278–289.

[41] Wheelen, T. L., & Hunger, J. D., (2012). Strategic management and business policy: Toward Global Sustainability. Upper Saddle River, NJ: Prentice Hall.

[42] Xiao, L., & Ramsden, M. (2016). Founder Expertise, Strategic Choices, Formation, and Survival of High-Tech SMEs in China: A Resource-Substitution Approach. Journal of Small Business Management, 54(3), 892–911.

[43] Xie, X., Zou, H., & Qi, G. (2018). Knowledge absorptive capacity and innovation performance in high-tech companies: A multi-mediating analysis. Journal of Business Research, 88, 289–297.

[44] Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. Academy of Management Review, 27(2), 185–203.

[45] Zizlavsky, O. (2016). Innovation performance measurement: research into Czech business practice. Economic research-Ekonomskaistraživanja, 29(1), 816-838.