Research Article

The Importance of Absorption Capacity and Innovation in Improving Company Performance

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Abstract. The purpose of this research is to analyze the importance of absorption capacity and innovation in improving company performance. The research method used in this study is a quantitative method with a descriptive analysis approach. The research population is all manufacturing companies which are included in the theoretical domain and listed on the Indonesia Stock Exchange. In this study, ten manufacturing companies listed on the Indonesia Stock Exchange were selected. For the company's performance variable, the Return on Assets (ROA) indicator is used. The type of data used in this study is secondary data. The analysis technique in this study is the outer model (convergent validity, discriminant validity and composite reliability). Based on the data and research results, it can be concluded that: 1) Absorption Capacity has an effect on Company Performance with a positive and significant influence on company performance which is indicated by the original sample estimate value of 0.922 and the T-statistic value of 11.777 which is greater than the t-value table (1.96); and 2) Company innovation has no effect on Company Performance with the original sample estimate value of -0.23 and the T-statistic value of 0.297 which is smaller than the t-table value (1.96).

Keywords: Influence, Absorptive Capacity, Innovation, Company Performance.

A. INTRODUCTION

The era of globalization requires companies to be able to develop technology, skills and knowledge to maintain the competitiveness of companies. Efficient supply partnership management has become a major interest for manufacturing organizations in gaining competitive advantage in today's fast-changing business environment. About half to two thirds of interorganizational relationships do not achieve their intended goals (Digdowaseiso & Sugiyanto, 2020; Digdowaseiso et al., 2020). This shows that the relationship between organizations and outsourcing implies a problem of information asymmetry between partners. This problem refers to the difference between the information held by suppliers and buyers (Sugiyanto, 2016; Sugiyanto & Sitohang, 2016). Therefore, problems regarding coordination costs, information asymmetry, and transaction costs have caused companies in interorganizational relationships to seek efficient practices to reduce information asymmetry and manage costs that go beyond company boundaries (Sugiyanto et al., 2018).

A company is a business entity that manages various resources which are divided into several aspects, namely: 1) financial; 2) materials (buildings and equipment), 3) technology; 4) humans with various methods in order to achieve the goal of making a profit. Among several resources, human resources are considered vital (Waluyo et al., 2019; Zalmasyhur, 2018). The capacity and ability of human resources (HR) has an important role in the progress of the development and growth of the company (Sugiyanto et al., 2018).

The priority of each company in achieving its goals is different, both companies engaged in trade, industry, and services. In manufacturing, the company's activities cannot be separated from the production process (Digdowiseiso & Zainul, 2020; Sugiyanto et al., 2018).
The production process is the various steps needed by the company to change inputs in the form of resources, raw materials, equipment and so on to be processed into outputs in the form of goods and services (Suharyono & Digidowaseiso, 2021; Rozandi & Digidowaseiso, 2021). In the implementation stage, the production activity has the aim of producing goods or services in a predetermined amount with predetermined quality and quantity standards (Taufik et al., 2021).

Companies must move and change perceptions towards an entrepreneurial orientation to achieve a sustainable competitive advantage in a changing business environment. Entrepreneurial orientation can be understood as the company's willingness to find and accept new opportunities and changes to further implement them in the company, in other words the company must have an entrepreneurial spirit to achieve superior performance (Minang et al., 2021). In addition, the absorptive capacity factor also affects the company's performance. Absorptive capacity is the company's ability to use external knowledge and can allow the company to make a difference between competitors who have the same new knowledge. Hernández-Perlines & Xu (2018) conducted research in a family company in Spanish. Which produces a significant influence between absorptive capacity has an influence on international performance.

Absorptive capacity incentivizes businesses to innovate, be more proactive and aggressive than competitors, and take calculated risks. Businesses adapt to changing environmental conditions through their entrepreneurial orientation and absorptive capacity. Businesses must be able to enhance organizational capacities in order to respond to market shifts brought about by the advent of new technologies.

According to Cohen & Levinthal (1990), who coined the term "absorptive capacity," external sources of knowledge are frequently critical for the innovation process, and thus the ability to use external knowledge is critical for the capacity of a business to innovate. Specifically, a company's absorptive capacity is defined by its ability to value fresh external knowledge, assimilate it, and use it to commercial ends. Absorptive capacity can be defined as a dynamic capability associated with the generation and exploitation of knowledge that enables a business to achieve and retain a competitive advantage. Grandinetti (2016) provides another definition: absorptive capacity is the process of monitoring, assessing, and acquiring or committing to remembering external knowledge. Thus, absorptive capacity can be defined as a company's ability to recognize and process monitoring, assessment, and external information in order to achieve a competitive advantage.

If a company has top management then the company will run well and apply the functions and principles of sound business management. Companies in the manufacturing industry are also supported by the fact that the manufacturing industry holds a broad supply chain with multiple inter-organizational links covering all steps from production to delivery of the final product to the consumer. As a result, various management control situations can be found in manufacturing companies.

The manufacturing industry is engaged in providing raw materials or semi-finished materials to be sold and later managed to make products according to market demand. In other words, the entire production process of a manufacturing company is in line with the many demands from the market about materials that must be met. In this type of industry, production management is needed so that the process runs optimally, besides that there are also several factors that affect the process, namely human resources, natural resources and production equipment. To fulfill each production process implementation, the company requires supply chain activities as shown in the following figure:
Supply Chain management is understood as a series of activities that include coordinating activities, determining schedules to controlling the production process of an item. In addition, SCM also has a role in procurement, inventory and delivery of a product in the form of goods and services to consumers and also includes daily administration, logistics, operations and information processing. In short, SCM is an activity that connects all parties in the company to carry out the production process, from raw materials to finished goods. The parties concerned and those who have been involved must be responsible for delivering finished goods produced to customers at the right time and location in the most efficient way (Waluyo et al., 2019).

Absorption capacity is related to the company's ability to recognize the value of new information, assimilate it, and apply it to commercial purposes. The absorptive capacity that enables the company to determine, collect, analyze, understand, and creatively use external information, contributes to management in creating customer loyalty and satisfaction. Although several studies have discussed absorptive capacity, a small number of studies which have examined the absorption capacity thoroughly have been found. In this study, it is seen that absorptive capacity focuses on competitive advantage, innovation and value creation.

Several of these changes include the following: (1) businesses will compete on multiple dimensions, not just one, necessitating constant improvement of business performance and product line expansion. (2) Businesses have the opportunity to expand abroad and confront increased competition. operating across multiple nations (3) Businesses will be able to adapt and integrate worldwide operational networks inside a single country or establish independent branches in other nations (Digdowiseiso et al., 2020).

Technology is one of the trends that businesses must adapt to. Technological advancement is a primary driver of competition. Technological advancements are critical in reshaping the industrial structure and spurring the establishment of new sectors. Technological advancements force businesses to consider how to continue developing their products, since technological sophistication increases consumer demand for a product's benefits. Therefore, innovation and technological advantage are important components in competitive strategy. Product or process innovation and development is one of the key strategic prerequisites, because the company must be able to improve technology, knowledge, exploit capacity and reach market from the idea. The final hope will certainly be to improve the company's performance (Waluyo et al., 2019).

The importance of product innovation on company performance in this case is financial performance is an important thing that will be discussed in this study. Innovation strategy is measured using various dimensions, namely: leadership orientation, type of innovation, sources used, and level of investment spent (Digdowiseiso & Sugiyanto, 2018). Based on this description, the authors are interested in analyzing the effect of absorption capacity and innovation on company performance.
B. LITERATURE REVIEW

1. Absorptive Capacity

Absorptive Capacity can be understood as the company's ability to recognize, obtain, and adapt to information in the company's external environment, then analyze and adjust the knowledge possessed and combine it with new knowledge that has been obtained from the external environment, which in turn utilizes all that knowledge to commercial purposes. But in addition to the commercial benefits obtained, organizational performance also takes into account the non-commercial benefits that will be obtained by a company.

Absorptive capacity is composed of two components: Potential Absorptive Capability (PAC), which encompasses the power to acquire and assimilate knowledge, and Realized Absorptive Capacity (RAC), which encompasses the capacity to transform and exploit knowledge. This absorptive capacity encompasses absorptive capacity, which is a measure of an organization's ability to utilize external scientific, technological, or other knowledge.

According to Cortez et al. (2015), the process of absorbing external knowledge becomes critical for organizations to innovate and adapt to changes in a competitive context. The purpose of this publication is to contribute to the body of knowledge about absorptive capacity by developing and validating two scales that assess two critical components of the absorptive capacity construct: potential and achieved absorptive capacity.

Additionally, according to Bigliardi (2013), organizational agility enables organizations to apply relevant knowledge to generate high-quality services and products or to respond to the appearance of new competitors. This magazine establishes a research framework for examining the relationship between managerial structure, organizational agility, and company performance. On a dataset of 112 big Spanish enterprises, the empirical study examined this association using partial least squares structural equation modeling. The modeling results validate the effectiveness of the set and sequence of knowledge management procedures, confirming not only the direct influence of knowledge application on organizational performance, but also the mediating effect of knowledge application on organizational agility.

According to the findings of a study conducted by Ndregjoni & Elmazi (2012), firm performance is judged in terms of two distinct dimensions: customer retention and financial performance. We conducted group confirmation analyses using structural equation modeling to test the empirical connections hypothesized in the structural model (Duran & Moreno, 2012). The analysis's findings indicate that Korean SMEs' strategic orientation toward agility has a beneficial effect on operational success and customer retention, but not on financial performance. The consequences of the findings, as well as theoretical contributions and future research prospects, are examined in detail. Based on this description, a conclusion can be drawn as follows:

H1: Absorptive capacity has a positive and significant effect on company performance.

2. Enterprise Innovation

Product research and development efforts in manufacturing firms that are directly related to financial performance are critical factors to consider when enhancing productivity and global competitiveness. Manufacturing innovation is the process of developing, selecting, and improving products, processes, and technology. Such innovations can assist manufacturing organizations strengthen their global position and establish themselves as world-class producers of high-quality goods. Businesses can effectively address competitive issues by utilizing new technology, developing and introducing (commercialization) or promoting these new items, and implementing innovative manufacturing techniques.

To reinvent the manufacturing process, businesses must establish a clear and thorough innovation plan. This strategy outlines the company’s innovation objectives by describing the
end product (what is developed) and the process (how it is developed) (how to achieve it). In four ways, a manufacturing company's innovation strategy can serve as a guide and guide for implementing executives: 1) By determining whether product or process innovation is a strategy pursued as a competitive priority, executives can connect manufacturing activities to the strategy that drives the company's competitive edge (e.g., the company's long-term planning); 2) The innovation strategy in manufacturing companies assists executives in allocating limited resources by prioritizing projects that enhance the manufacturing company's capabilities and competencies. Thus, innovation helps differentiate a company's products on the market, exerts influence over supplier negotiations, and keeps competitors away from the company; and 3) This strategy requires executives to justify the focus and sources of future manufacturing innovations by taking into account the company's strategy, industry conditions, internal capabilities, resources, strengths, and weaknesses. This will assist in aligning the innovation effort with the drive for success.

A manufacturing innovation strategy can also assist a business in defining its competitive advantage through product differentiation and value creation for consumers. If the new product or technique is sufficiently distinct from previous items to make it unique, it will be extremely difficult for competitors to copy. Businesses can employ these unique products to defend existing markets or expand into new niche markets, resulting in superior financial performance to competitors.

Numerous broad themes arose from numerous research examining the relationship between innovation activities and competitive advantage, including the following: 1) That invention that is difficult to replicate (imitability) will position the organization as a market leader. Poor strategies are easily imitated, necessitating the investment of more durable resources in competitive advantage; 2) Innovation that accurately reflects market reaction makes the company more superior in the competition; 3) Innovations that are less able to exploit the timing characteristics of the relevant industry make the company more superior in the competition; and 4) Innovation based on capabilities and easy-to-use technology makes the company more superior in the competition. Based on this description, a conclusion can be drawn as follows:

**H2: Innovation has a positive and significant effect on company performance.**

C. **METHOD**

The research method used in this study is a quantitative method with a descriptive analysis approach. The research population is all manufacturing companies which are included in the theoretical domain and listed on the Indonesia Stock Exchange. The research sample was taken by random purposive sampling with certain criteria. The classification of small, medium, and large companies for this research is based on the number of permanent employees, namely: (1) Small companies: 10-99 employees; (2) Medium companies: 100-499 employees; and (3) Large companies: 500 or more. In this study, ten manufacturing companies listed on the Indonesia Stock Exchange were selected. For the company's performance variable, the Return on Assets (ROA) indicator is used. The type of data used in this study is secondary data. The analysis technique in this study is the outer model (convergent validity, discriminant validity and composite reliability).

D. **RESULT AND DISCUSSION**

1. **Validity Test**

   There are three criteria with the Smart PLS analysis model to assess the outer model, namely with three indicators: 1) Convergent Validity; 2) Discriminant Validity; and 3) Composite Reliability. While the validity test in this study uses the Smart PLS analysis technique, namely Convergent validity which is seen by the square root of average variance
extracted (AVE) value of each construct where the value must be greater than 0.5. The results of the validity test in this study are presented in the following table:

| Variable                  | AVE   | √AVE  | Information |
|---------------------------|-------|-------|-------------|
| Absorptive capacity       | 0.885 | 0.941 | Valid       |
| Company Innovation        | 0.825 | 0.907 | Valid       |
| Company Performance       | 0.786 | 0.885 | Valid       |

Source: Data Proceed

According to the data in the table above, each construct (variable) has an AVE value greater than 0.5. This demonstrates that each of these variables has a high degree of validity, indicating that the indicators or questionnaire used to estimate absorption capacity, company innovation, and company performance are valid and have a high degree of discriminant validity.

2. Reliability Test

Testing data reliability using Smart PLS software with Composite Reliability test criteria. If the Composite Reliability rating is more than 0.7, the data is considered dependable. The reliability test is used to determine the internal consistency of a questionnaire that serves as a proxy for a variable or concept. A questionnaire is said to be reliable if the response to a statement consistently produces the same response. The results of the reliability test in this study are presented in the following table:

| Variable                  | AVE   | Information |
|---------------------------|-------|-------------|
| Absorptive Capacity       | 0.967 | Reliable    |
| Company Innovation        | 0.948 | Reliable    |
| Company Performance       | 0.936 | Reliable    |

Source: Data Proceed

From Table 2 it can be seen that each construct or latent variable has a composite reliability value above 0.7 which indicates that the internal consistency of the variables has good reliability.

3. Hypothesis Testing through Inner Model

Researchers conducted tests utilizing the Inner model to determine the association between the important value constructs and the research model's r-square. The structural model was evaluated using the R-square for the dependent construct, the Stone-Geisser Q-square test for predictive relevance, and the t-test, as well as the importance of the structural path parameters' coefficients. To see the T-statistic value in SmartPLS, it is found in the path coefficient after going through the bootstrapping process on a valid and reliable model that meets the model's feasibility.

Significant parameters estimated from the data provide extremely important information regarding the relationship between the research variables. The t-statistical value indicates that the given hypothesis will be tested. The threshold for accepting or rejecting the proposed hypothesis is 1.96, with the hypothesis accepted if the t-statistic value is larger than t-table (1.96), and rejected if the t-statistic value is less than t-table (1, 96). The expected output for structural model testing is shown in Table 3. When evaluating the model with PLS, the R-Square for each dependent latent variable is examined first, as indicated in Table 3 below:
Table 3. R-Square Result

|                    | R-Square |
|--------------------|----------|
| Absorptive Capacity | 0.302    |
| Company Innovation | 1.00     |

Source: data proceed

According to the data in the table above, the R-Square Absorptive capacity value is 0.302; this indicates that 30.2 percent of the Absorptive capacity variable is explained by the company's performance, while the remainder is explained by variables other than this study variable. The greater the R-Square, the more the independent variable's values will explain the value of the dependent variable, resulting in a more accurate structural equation. The company's innovation variable has an R-Square value of 1, indicating that 10% of the variance in the company's innovation variable can be explained by the company's performance and the remainder by variables other than this research variable. Additionally, the following table summarizes the findings of hypothesis testing:

Table 4. Result for Inner Weight

|                | Original Sample Estimate | Mean of Subsamples | Standard Deviation | T-Statistic |
|----------------|--------------------------|--------------------|--------------------|-------------|
| AC → CP        | 0.922                    | 0.906              | 0.079              | 11.772      |
| CI → CP        | -0.023                   | -0.016             | 0.076              | 0.297       |

Source: Data Proceed

4. The Influence of Absorptive Capacity on Company Performance

Hypothesis one (H1) states that Absorption Capacity has an effect on Company Performance. Based on the data that has been processed and presented in table 4. Absorption capacity has a positive and significant influence on the company's performance which is indicated by the original sample estimate value of 0.922 and the T-statistic value of 11.777 which is greater than the t-table value (1, 96). Thus, the results of the research hypothesis one (H1) are accepted.

Then to understand the extent, generational diversity in enterprise management, as an important resource for enterprises. Absorption is the ability of a company to absorb new information and knowledge from external sources that can be used to develop its business. Absorptive capacity allows companies to have patterns in processing and understanding information obtained from external sources so that they can easily adapt the company's routines by combining existing and newly acquired knowledge. Absorptive capacity can also be used to improve, expand, and enhance existing competencies in the company to create new things and be able to implement newly acquired knowledge. The company's ability to explore new knowledge for companies which is a process of exploiting knowledge will be able to increase external knowledge so that companies get new insights from outside. The mixing of new ideas with what has become a habit within the company is assimilation.

The results of this study are in line with the results of research by Ponce et al. (2020) and the research results of Zhou et al. (2021) which states that absorption capacity is positively and significantly related to company performance. Absorbency Capacity refers to the ability of a company to recognize value, external information, and apply it to the company's commercial objectives. The exchange of information will make it easier for companies and company partners to collaborate optimally, such as by working together to innovate products or create knowledge and utilize the company's capabilities to the fullest in order to maintain a competitive advantage.

If all these factors are present (communication climate, communication network and company's ability to seek knowledge) it will increase the company's absorption capacity in utilizing information. Good communication is necessary when companies in the supply chain
want to be successfully involved in the joint identification, management and resolution of a company's cost management and performance issues. If all these factors are present (communication climate, communication network and knowledge seeking) it will increase the company's absorption capacity in utilizing information.

5. The Influence of Company Innovation on Company Performance

Hypothesis two (H2) states that corporate innovation has an effect on company performance. Based on the data that has been processed and presented in table 4. Absorption capacity has a positive and significant influence on the company's performance which is indicated by the original sample estimate value of -0.23 and the T-statistic value of 0.297 which is smaller than the t-table value (1.96). Thus, the results of the second hypothesis research (H2) are rejected.

The results of this study are not in accordance with previous research conducted by (Muller et al., 2021) and (Arias Perez et al., 2021) which resulted in the effect of product innovation on the company's financial performance. This study is also in accordance with research (Gunday et al., 2011) which states that innovation is widely viewed as an important component in improving company performance.

Based on these results, it can be understood that product innovation does not have a significant impact on the company's financial performance. This result is different from signal theory which has implications for how a company gives signals to users of financial statements. A company will be able to increase company profits if the resources owned by the company can be managed properly so that it will automatically affect the company's revenue increase. Therefore, the company must have a strategy in providing a signal for shareholders to give a good signal in order to attract the attention of shareholders.

Product innovation is one of the strategies to create good value for the company in creating good performance to attract the attention of shareholders. The company conducts product innovation by conducting research and development (Research and Development) of new products that can add to the economic value of a company. By innovating products, companies will use their resources to be able to innovate through products that will then differentiate their products from competitors. Product innovation is very important for companies to strengthen their role in creating brilliant ideas or changes in accordance with environmental developments and consumer needs and demands.

E. CONCLUSION

Based on the data and research results, it can be concluded that: 1) Absorption Capacity has an effect on Company Performance with a positive and significant influence on company performance which is indicated by the original sample estimate value of 0.922 and the T-statistic value of 11.777 which is greater than the t-table value (1.96); and 2) Company innovation has no influence on the Company's Performance with the original sample estimate value of -0.23 and the T-statistic value of 0.297 which is smaller than the t-table value (1.96).

REFERENCES
1. Arias-Pérez, J., Lozada, N., & Henao-García, E. (2020). When it comes to the impact of absorptive capacity on co-innovation, how really harmful is knowledge leakage?. *Journal of Knowledge Management.*
2. Bigliardi, B. (2013). The effect of innovation on financial performance: A research study involving SMEs. *Innovation, 15*(2), 245-255.
3. Cortez, M. A. A., Ikram, M. I. M., Nguyen, T. T., & Pravini, W. P. (2015). Innovation and financial performance of electronics companies: a cross-country comparison. *Journal of International Business Research, 14*(1), 166.
4. Digdowiseiso, K. (2020). The Development of Higher Education In Indonesia. *International Journal of Scientific & Technology Research*, 9(2).

5. Digdowiseiso, K., & Sugiyanto, E. (2018). Causality on the Growth-Governance-Fiscal Decentralization Nexus: An Analysis of Time Series in Indonesia. *Journal of Applied Economic Sciences*, 13(7 (61)).

6. Digdowiseiso, K., & Sugiyanto, E. (2020). The effects of multinational companies on deforestation: The building block or stumbling block. *Journal of Environmental Management and Tourism*, 11(1 (41)).

7. Digdowiseiso, K., & Sugiyanto, E. (2021). How Effective is Institutional Quality for the Creation of Small & Medium Enterprises (SMEs) in Indonesia?. *Economics & Sociology*, 14(1), 263-274.

8. Digdowiseiso, K., & Zainul, D. (2020). Fiscal Decentralization in District of Karawang, Indonesia. *International Journal of Scientific & Technology Research*, 9(2).

9. Digdowiseiso, K., Setiawan, H. D., Sugiyanto, E., & Suharyono, S. (2020). Does leadership matter in managing the village-owned enterprise?. *Opción: Revista de Ciencias Humanas y Sociales*, (93), 115-135.

10. Digdowiseiso, K., Sugiyanto, E., & Setiawan, H. D. (2020). Business Licensing and the Indonesia’s Master Plan 2011–2025. *International Journal of Scientific & Technology Research*, 9(01).

11. Digdowiseiso, K., Sugiyanto, E., & Setiawan, H. D. (2020). Business Licensing and The Indonesia’s Master Plan 2011–2025. *International Journal of Scientific & Technology Research*, 9(01).

12. Digdowiseiso, K., Sugiyanto, E., & Setiawan, H. D. (2020). Fiscal Decentralisation and Inequality in Indonesia. Экономика региона. 2020. Том. 16, выпуск 3, 16(3), 989-1002.

13. Durán-Vázquez, R., Lorenzo-Valdés, A., & Moreno-Quezada, G. E. (2012). Innovation and CSR impact on financial performance of selected companies in Mexico. *Journal of Entrepreneurship, Management and Innovation (JEMI)*, 8(3), 5-20.

14. Hernández-Perlines, F., & Xu, W. (2018). Conditional mediation of absorptive capacity and environment in international entrepreneurial orientation of family businesses. *Frontiers in psychology*, 9, 102

15. Minang, H. P., Digdowiseiso, K., & Sugiyanto, E. (2021). Pelaksanaan Kebijakan Alokasi Dana Desa Dalam Memperdayakan Masyarakat Desa: Studi Kasus Desa Caturtunggal, Kecamatan Depok, Kabupaten Sleman. *Ilmu dan Budaya*, 42(73).

16. Müller, J. M., Buliga, O., & Voigt, K. I. (2021). The role of absorptive capacity and innovation strategy in the design of industry 4.0 business Models-A comparison between SMEs and large enterprises. *European Management Journal*, 39(3), 333-343.

17. Ndregioni, Z. H. A. N. E. T. A., & Elmazi, L. I. L. J. A. N. A. (2012). The effects of relationship between information technology and firm innovation on firm performance: The case of Albania. *International Journal of Management Cases*, 14(1), 235-246.

18. Ponce-Espinosa, G., Peiro-Signes, A., & Segarra-Oña, M. (2020). Absorptive capacity and in-company routines: modelling knowledge creation in the tourism industry. *Knowledge Management Research & Practice*, 1-11.

19. Rozandi, M., & Digdowiseiso, K. (2021). Implementasi Penggunaan Dana Desa Terhadap Pembangunan (Studi Kasus Desa Sengkubang Kecamatan Mempuwah Hilir Provinsi Kalimatan Barat). *Jurnal Sosial dan Humaniora*, 6(1), 47-62.

20. Sugiyanto, E. (2016). Analisis komitmen organisasi, iklim organisasi dan kepuasan kerja pegawai di Sekretariat Jenderal Kementerian Agama RI. *Populis*, 1(1), 19-34.

21. Sugiyanto, E., & Digdowiseiso, K. (2017). Revisiting the Aid-Growth Nexus: New Evidence on 56 Least Developed Countries. *J. Advanced Res. L. & Econ.*, 8, 1950.
22. Sugiyanto, E., & Digdowiseiso, K. (2019). Do incidence and duration of child labour matter on schooling in Indonesia?. *International Journal of Education Economics and Development, 10*(1), 22-35.
23. Sugiyanto, E., & Sitohang, C. A. (2017). Optimalisasi fungsi ruang terbuka hijau sebagai ruang publik di taman Ayodia Kota Jakarta Selatan. *Jurnal Sosial dan Humaniora, 2*(3), 205-218.
24. Sugiyanto, E., Digdowiseiso, K., Waluyo, T., & Setiawan, H. D. (2018). The Effects of Specific Allocation Fund (DAK) on Local Economic Development: A Mixed Method Analysis on Central Java Province, Indonesia. *Journal of Applied Economic Sciences, 13*(8 (62)), 1-9.
25. Sugiyanto, E., Djumadin, Z., & Digdowiseiso, K. (2018). Irrigation planning in the era of local autonomy: an analysis of existing and alternative model. *J. Advanced Res. L. & Econ., 9*, 692.
26. Sugiyanto, E., Djumadin, Z., & Digdowiseiso, K. (2018). Irrigation planning in the era of local autonomy: an analysis of existing and alternative model. *J. Advanced Res. L. & Econ., 9*, 692.
27. Suharyono, S., & Digdowiseiso, K. (2021). Education and gender wage gap: Evidence from Indonesia. *Accounting, 7*(1), 33-40.
28. Suharyono, S., & Digdowiseiso, K. (2021). The Effects of Environmental Quality on Indonesia’s Inbound Tourism. *International Journal of Energy Economics and Policy, 11*(1), 9.
29. Taufik, A., Sugiyanto, E., & Digdowiseiso, K. (2021). Analisis Kesehatan Keuangan Daerah Kabupaten/Kota Se Provinsi Banten Tahun Anggaran 2016-2019. *Ilmu dan Budaya, 42*(73).
30. Waluyo, T., Digdowiseiso, K., & Sugiyanto, E. (2019). The Costs of Reduction Emission from Deforestation and Forest Degradation. Concepts and Issues. *Journal of Environmental Management & Tourism, 10*(1 (33)), 636-72.
31. Waluyo, T., Digdowiseiso, K., & Sugiyanto, E. (2019). The Costs of Reduction Emission from Deforestation and Forest Degradation. Concepts and Issues. *Journal of Environmental Management & Tourism, 10*(1 (33)), 636-72.
32. Zhou, M., Govindan, K., Xie, X., & Yan, L. (2021). How to drive green innovation in China's mining enterprises? Under the perspective of environmental legitimacy and green absorptive capacity. *Resources Policy, 72*, 102038.
33. Zulmasyhur, Z. (2018). Reexamining the economic growth–education inequality–income distribution nexus in Indonesia. *Journal of Applied Economic Sciences (JAES), 13*(58), 979-988.