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Analysis of Intellectual Capital on Company Financial Performance in PT Reethau Cipta Energy

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Abstract: The research aims to investigate the relationship between intellectual capital of the key resource-based components of the company (physical capital, human capital and structural capital) with financial performance using ROA (return on assets), ROI (returns on investment), and GR (growth revenue). The data is obtained from the financial reports of the company PT Reethau Cipta Energi for the period 2019 – 2021 and the results of employee questionnaires on a Likert scale. This study tested three elements of VAIC (value added intellectual capital) and measures the financial performance of an enterprise using partial least squares (PLS) for data analysis that showed that: (1) Intellectual Capital has a significant influence on Return on Assets (ROA). Intellectual Capital Affects Return on Investment (ROI). (3) Intellectual capital has a significant impact on Revenue Growth (GR). (4) Intellectual capital has no significant influence on overall financial performance.

Keyword: Intellectual Capital, Financial Performance Return on Assets, Return on Investment, Revenue Growth

INTRODUCTION

Companies are currently undergoing a transformation in their business approach, moving from a workforce-dependent business to a knowledge-dependent business. The effectiveness of an organization depends on the use of knowledge properly, knowledge must be developed and managed to create intellectual capital for an organization (Armstrong, 2007). Intellectual Capital has become more popular in Indonesia since the Statement of Financial Accounting Standards (PSAK) No. 19 concerning intangible assets, which marked the beginning of the development of intellectual capital. (Pulic, 1998) proposes an indirect assessment of intellectual capital. The purpose of this assessment is to find out how effective the added value is generated by the intellectual capabilities of the organization.

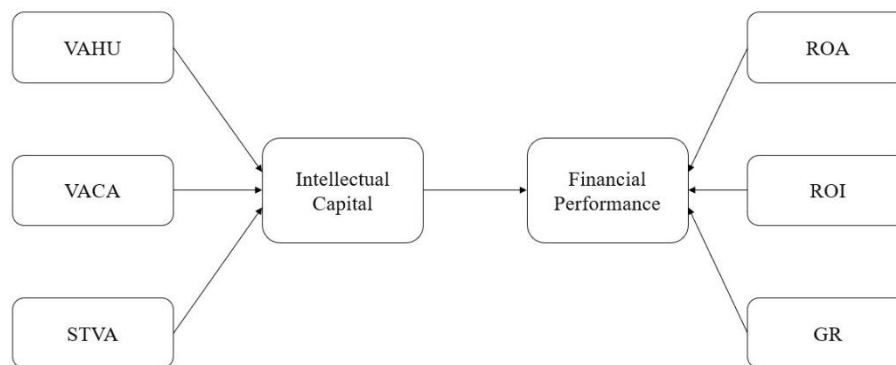
This study was conducted because there were differences in the results of previous studies (research gaps) conducted by several previous researchers related to the variables studied. What is meant is the results of a study from (Aninditya et al, 2022) is relatively inconsistent with (Ulum's, 2007) research. In a study by (Aninditya et al, 2022), found that there is a negative effect between Intellectual Capital (VAICTM) and the company's financial

performance. Meanwhile, (Ulum's, 2007) research proves that there is a positive and significant influence between Intellectual Capital (VAIC™) and the company's financial performance. (Baroroh's, 2013) research, which took a sample of manufacturing companies in Indonesia, supports (Ulum's, 2007) research. This study evaluates how intellectual capital (proxied by VAIC™) impacts the financial performance of PT Reethau Cipta Energi's business.

METHOD

Research Design

This empirical study aims to prove that there is a causal relationship between financial performance (measured by VAIC) and intellectual capital. This study investigates the causal relationship between variables based on the data collected. This study tests the hypothesis about how the independent and dependent variables affect one another.



Source: Research Results
Figure 1. Conceptual Framework

Operational Variables

Independent Variable

According to (Ningrum, 2018), intellectual capital is an intangible asset that can help companies become more competitive. They can also be used to increase post-employment compensation, career advancement opportunities, and training company profits. In this study, the measurement of intellectual capital uses the concept of value added which is obtained from reducing output and input or can also be calculated from company accounts and finally calculating the Value added Intelligence Coefficient (VAIC) (Anggraini et al., 2020).

Dependent Variable

Financial performance (PERF) is the variable that is influenced in this study. Financial performance can be measured by profitability indicators ROA (Chen et al., 2005; Tan et al., 2007), ROI (Chen et al., 2005), and GR (Chen et al., 2005). Because total equity is the denominator of ROE which is one of the elements of VACA, ROA is preferred over ROE.

Data Analysis Technique

The data used in this survey are secondary data and primary data. Secondary data is the financial report of the company after it has been audited. The report used in the research is the annual financial report for the period 2019, 2020, 2021. The financial report is obtained through the internal company. Primary data was collected through questionnaires to 40 employees from various divisions and departments.

Created by (Pulic, 1998; 1999) physical capital, human capital, and structural capital are three models of intellectual capital (IC) used to evaluate the efficiency of VAIC. To do this, VACA, VAHU, and STVA are used separately, and use the sum of the three components. In accordance with the research objectives, the Partial Least Square (PLS) method is the most

appropriate method of solving equation structural modeling (SEM) for data analysis. PLS is more suitable for selection than other SEM techniques because of its small sample, the possibility of abnormal distribution of variables, and the use of formative and reflexive indicators (Tan et al., 2007).

RESULTS AND DISCUSSION

Inner Model

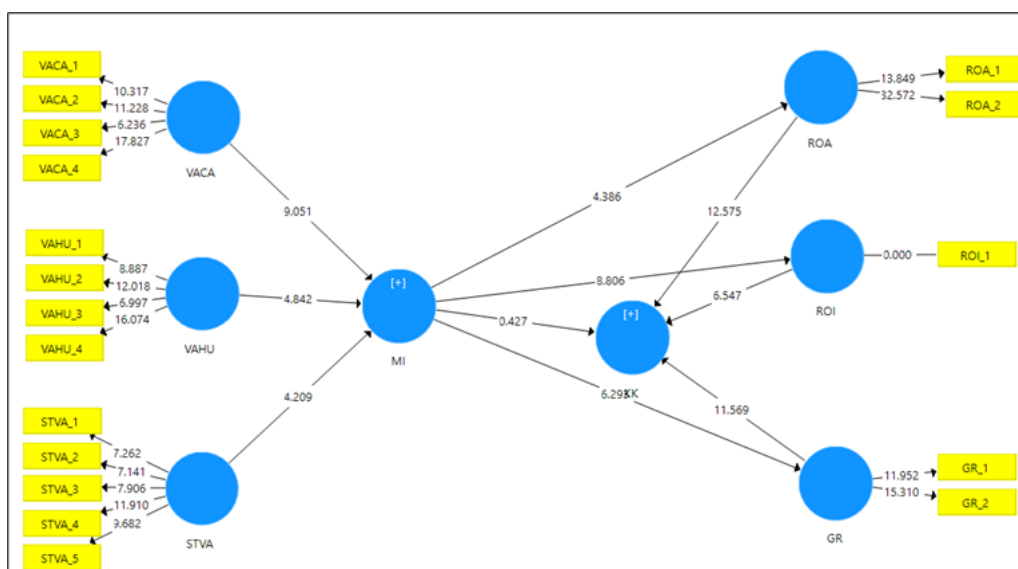
Testing the inner model, also known as the structural model, was conducted to evaluate the relationship between the constructs, the significance value, and the R-square of the research model. The structural model can be evaluated using the R-square for the dependent construct, and the t test and the significance of the structural path parameter coefficients. According to (Chin, 1998), the criteria for limiting the R - Square value are in three classifications, namely the R - Square values of 0.67, 0.33, and 0.19 as substantial, moderate, and weak.

	R Square	R Square Adjusted
GR	0.467	0.453
KK	1	1
ROA	0.243	0.223
ROI	0.455	0.44

Source: PLS Results

Figure 2. R-Square Value

Based on the table above, it shows that the R-square ROA value is 0.243, which means that the Intellectual Capital variable is able to explain the ROA variable of 24.3% which is classified as weak. R-square ROA as presented in the table is a test of H1. While the ROI and GR R-square values are 0.455 and 0.467 respectively, meaning that the Intellectual Capital variable is able to explain the ROI and GR variables of 45.5% and 46.7% which are classified as moderate. R-square ROI and GR as presented in the table above is a test of H2 and H3. The R-square value for KK is 1, meaning that the Intellectual Capital variable can explain the Financial Performance variable at 100% which is classified as substantial. R-square KK is a test of H4.



Source: PLS Results

Figure 3. Inner Model

Based on Figure 3 above, it shows that H1, H2, and H3 are completely accepted. That is, Intellectual Capital affects ROA, ROI, and GR with a T-Statistic value above 1.282 for $p <$

0.10; 1.645 for $p < 0.05$; and 2.326 for $p < 0.01$. While the H4 results show opposite results, namely Intellectual Capital has no effect on overall Financial Performance with a T-Statistic below 1,282 for $p < 0.10$; 1.645 for $p < 0.05$; and 2.326 for $p < 0.01$. That is, H4 is rejected.

Effect of Intellectual Capital (VAIC) on Financial Performance ROA, ROI, and GR (H1, H2, and H3)

Intellectual Capital is tested against ROA, ROI, and GR financial performance using primary and secondary data. Primary data was obtained from questionnaires distributed to employees to determine perceptions of Intellectual Capital on financial performance, while secondary data was obtained from financial reports for the period 2019 to 2021. The results of employee perceptions can explain the numbers contained in the company's financial reports.

Figure 3 proves that the T-Statistic values of all indicators between Intellectual Capital (VAIC) and ROA, ROI, and GR are above 1,645. This shows the significance of loading at $p < 0.05$ (1-tailed) and indicates that there is a significant influence of Intellectual Capital (VAIC) on the financial performance of ROA, ROI, and GR. The R-square value for ROA in table 4.4 is 0.243; for ROI of 0.455 and GR of 0.467 which indicates that the power of Intellectual Capital (VAIC) in explaining the ROA financial performance variable is 24.3%; ROI of 45.5%; and GR of 46.7%. So that H1, H2, and H3 can be accepted.

Effect of Intellectual Capital (VAIC) on Overall Financial Performance (H4)

Figure 2 shows that the T-Statistic value of all indicators between Intellectual Capital (VAIC) and Financial Performance (PERF) is below 1.645. This shows that the loading is not significant at $p < 0.05$ (1-tailed) and indicates that there is no significant influence of Intellectual Capital (VAIC) on overall financial performance. The results of this study are in line with the findings of (Alviani, 2011) which states that Intellectual Capital (VAIC) has no statistically significant effect on overall financial performance. But partially in line with the findings of (Ulum, 2008) which states that Intellectual Capital (VAIC) has an effect on ROA which is a significant indicator in the construct of Financial Performance.

Discussion

The company has changed the treatment of human resources to human capital during the 2019 – 2021 period, this is evidenced by the development of the organizational structure and changes in the strategy for hiring educated employees. The results of research H1, H2, and H3 indicate that intellectual capital has a significant effect on the company's financial performance. These results indicate that the success of the human capital management process being carried out by the company. With this, the company needs to increase added value to the company's intellectual capital so that the company's goal of improving financial performance can be achieved.

The H4 test shows that intellectual capital has no effect on overall financial performance with ROA, ROI, and GR measurements. This indicates that there are other variables that should be used as measurements such as ROE (Return on Equity) and EPS (Earning per Share). In addition, the addition of intervening variables such as leadership style and employee communication style can help explain the effect of intellectual capital on financial performance.

CONCLUSION

Hypotheses 1, 2, and 3 of this study are that Intellectual Capital (VAIC) affects the financial performance of ROA, ROI, and GR. Statistically, based on the results of the PLS test, it is known that (both the t-statistics value and the R-square value) there is an influence of Intellectual Capital on the profitability indicators ROA, ROI, and GR. So that H1, H2, and H3 are accepted. The results of the study show that the management of intellectual capital

(Employee Capital, Human Capital and Structural Capital) reflects the company's success based on added value which is shown in the increase in ROA, ROI, and GR.

The test results show that Intellectual Capital (VAIC) has no effect on overall financial performance. Where, the value of the latent variable forming Intellectual Capital is smaller than the value of the latent variable forming financial performance. This indicates that the number of employee perceptions of Intellectual Capital is still not optimal, more specifically for the STVA and VAHU indicators which have lower t-statistics.

The results of the PLS statistical test show that the ROA number has the highest value from employee perceptions as a construct of financial performance, while the numbers listed in the company's financial statements show that ROA has the lowest value during the 2019 – 2021 period. There is a discrepancy in employee perceptions with the condition of financial statements due to communication and leadership style that has not worked so that employees are not suitable in giving perceptions of financial performance. This is evidenced by the very dominant number of respondents at the staff and non-staff levels so that the results of testing employee perceptions are not in line with the calculations of financial statements.

Overall, the primary data obtained from the employee perception questionnaire can explain the financial report calculation data. This is shown in the results of the PLS statistical test (both t-statistics values and R-square values) showing results that support the calculation of financial statement figures.

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