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# **Educational Modeling Drives Company Value Creation**

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Abstract: This study aims to explore the connection between education and the creation of value within corporations. Education, as a value-driving factor, is measured in terms of human resource development across two variables: training & development and cost control. Research reveals that these variables have a significant impact on employee performance, which in turn plays a role in driving financial performance. Combining non-financial and financial perspectives, this creates a leading-lagging continuum. The research method is quantitative, utilizing a purposive sampling technique and panel data analysis through E-views10. Results demonstrate that employee performance is positively linked to profitability, which is achieved through increased revenue and controlled costs. The impact of human resource factors on financial performance is highly significant, ranging between 81.74 percent and 100 percent with a p-value of < 0.05. Apart from gross profit, net profit, and NOPAT, economic value added (EVA) also generates a positive impact. EVA stands as a true gauge of profitability, a crucial element that determines the success of corporate operations. By precisely calculating the cost of capital employed, EVA provides accurate profit figures. Moreover, it is a decisive factor in determining a company's stock price, making it an essential tool in creating and boosting company value.

Keywords: Education, Value Driver, Value Creation.

#### **INTRODUCTION**

Measuring the advantages of investments involves utilizing Return on Capital Employed (ROCE) and Economic Added Value (EVA) approaches. By assessing the effectiveness of financial strategies, companies can identify ways to increase revenue, decrease costs, and optimize assets. Asset intensity can also be augmented by identifying supporting factors. To achieve optimal financial performance, companies must establish a strategic plan, which outlines their long-term targets. Achieving a high return on investment is an example of such an objective.

Human Resources management aims to enhance the capacity of both managers and staff to deliver competitive goods and services that drive company profits. The focus of Human Resources Development is on maximizing the contributions made by managers and staff towards boosting profitability. To achieve this, the company's growth strategy must prioritize training and development programs. Successful Human Capital Management requires deep understanding of key processes to produce high-quality outputs with minimal inputs, while meeting established quality and time standards. Ultimately, the company's competitive output will drive profits by enabling it to sell goods and services at prices higher than their costs, while minimizing expenses.

The mindsight of each business unit, profit center, and divisional work unit can be unified by the Balanced Scorecard's framework of strategic objectives. Kaplan and Norton's 1990 study highlighted the insufficiency of using financial metrics in business development. Organizational learning, as explained by Valerio in Makhijani & Creelman (2012), has had a profound impact on the Balanced Scorecard's development and implementation. By constantly increasing personal knowledge through a learning loop and having the correct infrastructure in place, organizational know-how can be achieved. As knowledge increases, so does performance. Research is being conducted to determine the relationship between financial metrics and non-financial performance drivers as organizational outcome measures.

As the global COVID-19 pandemic raged on, the scope of the discussion was limited. The research focused on (1) examining education determinants by proxy through Training & Development and human resource management, specifically in the context of Cost Control implementation for business processes, procedures, and work mechanisms. (2) The goal of Cost Control is to achieve job specifications within budget constraints. (3) The study population comprised Public Companies and similar entities that actively operated in the five years leading up to the COVID-19 pandemic. (4) The Indonesia Stock Exchange was the research field for the study, with an emphasis on the current conditions. (5) The sampling method aimed to ensure representativeness of the sample from the population. The research aimed to identify non-financial factors that drive financial outcomes and performance measures.

#### **THEORETICAL REVIEW**

Acquiring education enhances both the expertise and skills in the field of Human Resources. To be deemed a professional, one must possess the ability to execute a task with precision, adhering to relevant concepts or theories that ensure stakeholder satisfaction. According to Merriam Webster (1928), education involves formal instruction and supervised practical training, aimed at mental, moral, and aesthetic development. It involves imparting knowledge, facilitating learning, and cultivating desired behaviors in oneself and others. Ultimately, it aims to educate the public.

Within the organization's Human Resources protocol, competence is a non-negotiable requirement. To achieve this, employees need to effectively execute their responsibilities at the expected level of proficiency. Kosomowidjoyo (2017) highlights the significance of two key elements to consider when addressing employee competence for organizational development and learning - the level of employee training facilitated by the organization and their overall productivity. Hence, employee productivity can act as a viable measure of performance by tracking their involvement in human resource development and training initiatives.

Educating employees is crucial for managing and controlling human resources, ensuring that they work towards achieving targeted performance, ultimately driving the company's progress. Skilled, knowledgeable, and well-trained employees will deliver the maximum output and adhere to the plan with minimal deviations, leading to optimal company performance. However, according to Semiawan (1999), development is not an internal process but is instead regulated by external environmental factors. Therefore, it's crucial to shift the focus of education towards developing and realizing human capacity, also known as Human Capacity Development (HCD). This will empower individuals to choose various roles and seize

multiple opportunities for participation in society as workers, consumers, parents, etc. The goal of this development is primarily from within and triggered for its actualization

The recognition of human involvement in business operations and the desire to enhance the quality of human resources is driving change. As a result, there is a growing interest in Human Capital Management, which aligns with the growing application of the human capital concept across various organizations.

#### **Performance of the employee**

The notion of 'performance' entails an employee's successful completion of assigned tasks (Cascio, 1992). An individual's duties, in line with their responsibilities, dictate the quality and quantity of work produced, thus determining their level of performance (Kamisah, 2012). Singh (2013) posits that factors such as ability, work ethic, and job prospects also impact an employee's performance. Furthermore, Style (2015) notes that the skills, experience, and timeliness with which tasks are carried out play a crucial role in determining performance metrics.

The company stands to gain immensely from the exceptional performance of its employees. High-performers ensure that all tasks are executed to the highest standards, resulting in efficient and top-quality work output. This approach not only helps to minimize production costs and other associated expenses but also positions the company's products and services competitively, leading to increased sales and profits.

By investing in Training and Human Resource Development, it is possible to enhance the abilities and potential of personnel.

When an organization produces a higher output than input, it can be deemed efficient, and if it achieves its set goals, it's considered effective (Fremont, Kast, & Rosenweig, 1976). Peter Drucker emphasizes that efficiency means using minimal resources to achieve organizational goals, or "doing the right thing," while effectiveness is setting the appropriate goals, or "doing the right thing" (Stoner, Edward, & Gilbert Jr., 1995). Hence, educating and directing human resources to perform in line with the organization's expectations is crucial to achieving satisfactory results.

By modifying knowledge, skills, or attitudes, a systematic process referred to as training helps people become more effective at work through learning experiences. This results in improved performance, as explained by Buckley and Caple in 2009. The global marketplace has shown that enhancing the capabilities, knowledge, and skills of a talented workforce is a significant source of competitive advantage, as highlighted by McKinsey in 2006.

The theory of controlling costs. (Note: If this is the complete text provided, there is not much to recreate as it is already a concise statement.)

The three-step process of control involves measuring progress, evaluating outstanding tasks and taking corrective measures for goal attainment. According to Mocker RJ as cited in Husen (2011), control is an intentional effort to set standards in line with planning objectives, design information systems, compare implementation with standards, scrutinize possible deviations, and take necessary corrective actions to achieve efficient resource usage, goals, and objectives. Kerzner (1992) affirms that cost control is not only about tracking and recording costs but also analyzing data in real-time for timely resolution. Control requires benchmarks and measuring tools to be analyzed to identify the source of any problem and correct it to achieve efficiency in any task or plan execution. Thus, cost control involves monitoring and recording costs and taking prompt corrective measures to ensure cost-effective resource utilization.

#### Financial performance can be measured through profitability.

A company's financial performance portrays its monetary status during a specific time frame by evaluating inflows and outflows from business operations - determined through financial ratios divided into different categories. Gitman & Zutter (2015) identified several

categories, including liquidity, activity, debt, profitability, and market ratios. Liquidity, activity, and debt ratios gauge risk levels while profitability ratios measure returns. Market ratios, on the other hand, provide insights on both risk and return.

In assessing a company's financial health and performance, profitability is a crucial factor. It serves as a clear benchmark for the business's efficiency relative to its stock price assessment. Evaluating profitability through various ratios, companies can be classified into two categories: margin ratios and return ratios. By analyzing such ratios, businesses can gain a better understanding of their health and performance, alongside other financial benefits.

#### The economic value added by essential value to a company.

Developed commercially in the 1980s by G. Bennett Stewart, III and Joel Stern, Economic Value Added is a financial metric that is gaining increasing acceptance in the corporate finance community. What sets EVA apart from traditional profitability measures, like net income and net operating income after tax, is its focus on a firm's "residual profitability." EVA subtracts the direct and indirect costs of debt and equity capital from a company's profits, providing a more accurate representation of its true profitability. As a result, EVA is considered to be a contemporary measure of financial success that aligns closely with the goal of maximizing shareholder wealth. In essence, EVA is a variation of residual income and can be expressed mathematically as EVA = NOPAT - (WACC \* capital invested).

The creation of value is a responsibility that rests not only with financial experts and management, but with every single employee. While it is the job of finance and accounting professionals to establish a solid foundation via accurate result measurement and reporting, they also factor into designing the appropriate capital structure to keep the company cost-effective. It is the operations managers and their teams who hold the key to true value creation. These are the individuals who produce and market company products and services, cultivate customer and supplier relationships, and construct the organizational competencies necessary for substantial value creation (Young & O'Byrne, 2001).

#### Viewing education as a catalyst for generating corporate value is a notable concept.

This research delves into two distinct areas: a non-financial perspective and a non-financial & financial perspective. Variables are classified based on these fields, with a focus on exploring the cause-and-effect relationships and motivators that foster improved performance. The interplay between these variables exists on a leading-lagging continuum, with non-financial factors exerting significant influence on financial factors to generate value and benefits for the organization. Kaplan & Norton (1996) suggest that formulating hypotheses requires an analysis of the correlation between various measured factors to better understand the nature of these interactions.

To achieve optimal employee performance, Human Resources Development can be effectively implemented through training & development and cost control measures. These non-financial variables drive business results by generating collective work benefits for the organization. This approach falls under the "non-financial" perspective, while the "non-financial & financial" perspective includes processing revenue and costs for gross profit, net profit, NOPAT, and EVA. A positive EVA can subsequently increase stock prices and enhance overall company value.

#### **RESEARCH METHODS**

The research undertook a comprehensive descriptive, verification, and explanatory approach. It began by outlining the variables studied and then testing the hypothesis's validity. The research also disclosed the influence or relationship of independent variables on the dependent variable. The study's first stage involved gathering non-financial data from respondents to gain insights into the subject matter. During the second stage, the research focused on secondary data to obtain financial data from the population.

#### **Research Data and Variable Definition**

To gather data, researchers adopted a methodical approach, specifically purposive sampling that selects samples based on dominant population characteristics aligned with research goals. According to Sugiyono (2010), data sources are collected through careful decision-making. The COVID-19 pandemic has affected Indonesia's economic and business life, including construction companies, so distributing questionnaires to the entire population may not yield an immediate response. Nonetheless, the collected data is deemed representative of the overall population.

#### **Population and Sample**

The research focused on Construction Service Companies that had a presence in the Capital Market, particularly the Indonesia Stock Exchange (IDX), for five years before the Covid-19 Pandemic struck. The study's population was composed of eight Public Companies or "Tbk" (publicly listed firms), including State-Owned Enterprises Karya and sizable National Private Construction Companies.

To clarify, this research delves into data from various companies, categorized as follows: Firstly, large construction companies in Indonesia that are actively trading on the IDX, including those owned by the state, "Karya," and national private companies. For state-owned "Karya" firms, the sample is representative of 50% of the population, comprising 2 out of 4 IDX companies: PT Adhi Karya and PT Waskita Karya. The remaining 75% of the population constitutes private construction companies, of which there are only four that have been actively operating for five years. From this group, the following companies were included in the study due to their availability: state-owned PT Jaya Konstruksi MP., PT Nusa Cipta Raya, and PT Total Bangn Persada.

Several respondents were assigned individual companies for research, and research instruments were used to collect data. In total, 40 respondents studied samples from five companies. These samples included officials, workers, and officers from different groups, such as Project Managers, Site Managers, Engineers, and Foremen or Supervisors. The research was organized to ensure that the data collected meets the criteria necessary for scientific writing.

#### Data collection technique

When conducting research, primary and secondary data collection techniques are utilized. This involves a quantitative approach that draws on literature, desk studies, and theoretical analysis to ensure sustainability throughout the research process. The methods of data collection are influenced by research objectives and design. The initial step involves direct field exploration for non-financial aspects, where primary data is collected through questionnaires distributed to selected individuals. The Likert scale is utilized for data investigation via opinion surveys. For the financial and non-financial spheres, secondary data in the form of annual financial reports from 2015-2019 are accessed via the Indonesia Stock Exchange website.

#### **RESEARCH RESULTS AND DISCUSSION**

#### Analysis and Discussion of Research Results

The E-views modeling was utilized to test the non-financial scope research hypothesis. A Common Effect Model Regression was employed, accompanied by Classical Assumption Tests that included a normality test. The Jarque probability Berra was established at 0.205679, indicating that research data residuals were normally distributed. The Heteroscedasticity test

was performed using Breusch-Pagan-Godfrey, with a probability of 0.0635 which was greater than 0.05, indicating an absence of heteroscedasticity in the research model. Similarly, Autocorrelation Test using Breusch-Godfrey Serial Correlation LM Test had a probability value of 0.0635, further substantiating an absence of heteroscedasticity in the research model. Multicollinearity test was also conducted which showed that the VIF value was less than 10, thus proved that there was no multicollinearity in the research model. Finally, the Hypothesis Testing involved the T-test, F-Test, and Determinants which were evaluated successively in the subsequent section.

Within this section, we explore a total of 20 hypotheses. Out of these, three are centered on the non-financial perspective model while the remaining 17 delve into the non-financial and financial perspective model. The non-financial variable relationship framework posits that these hypotheses can enhance individual employee performance, collective performance, and economic value added (EVA) by increasing company income.

# **1. Non-financial Perspective Model**

# a. The Effect of Training & Development on Employee Performance

**Hypothesis 1:** Rejecting Ho as the probability value of 0.0150 <0.05 and accepting H1, the study confirms the impact of training and development on employee performance. The variable of training and development has a positive coefficient of 0.563347, indicating a direct correlation between the two. A t-value of 2.550480 > 1.96 establishes the significant effect of training and development on employee performance. These results align with the findings of Imran & Tanveer (2005), Turere (2013), Afroz (2018), Ratnasari & Sunuharyo (2018), Martini et al., (2020), confirming the influence of training and development on employee performance.

# b. Effect of Cost Control on Employee Performance

**Hypothesis 2:** Rejecting Ho and accepting H2 occurs when the probability value is less than 0.05, which was the case with a value of 0.0372. This outcome indicates that cost control has an impact on employee performance, as evidenced by the positive coefficient value of 0.133136. The t-value of 2.161681, which is greater than 1.96, establishes that training and development has a significant effect on employee performance. Research from Afriyani & Sukirno (2012), Anggarini & Sujana (2016), Taradipa (2017), Hakim (2018), and Savitri & Neem (2020) supports these findings.

# c. Effect of Training & Development, and Cost Control together on Employee Performance

**Hypothesis 3:** Rejecting Ho and accepting H3 is warranted when the probability value is less than 6.895152, as in the case of 0.002850. Therefore, it can be inferred that the combined impact of training & development and cost control on employee performance is significant. Additionally, the coefficient of determination, which stands at 23.21 percent, illustrates how training & development and cost control affect performance.

Based on statistical analysis, it has been demonstrated that employee performance is positively impacted by training and development initiatives, as well as cost control measures. The model's coefficient of determination, at 23.21%, indicates a significant "fit" with the data. However, this study has only examined a portion of the factors that may influence employee performance, with 76.79% remaining unexplored. The training and development variable has a direct impact on performance, with a significant coefficient of 0.563. Similarly, cost control measures also have a tangible effect on employee performance, albeit with a smaller coefficient of 0.133 and a unidirectional correlation. When taken together, training and development, and cost control initiatives

have a significant impact on employee performance, as indicated in the model equation: Y = 105.033 + 0.563X1 + 0.133X2.

# 2. Non-financial & Financial Perspective Model. The modeling effect of the independent variable on the dependent variable is by using E-views.

# a. Effect of Training & Development on Income

**Hypothesis 4**: Rejecting Ho and accepting H4 with a probability value of 0.000 <0.05 indicates that training and development significantly affects income. This assertion is further supported by the t-value of 25.57637 > 1.96. Specifically, employee training and development programs are designed to drive revenue generation and yield positive business outcomes. This finding aligns with previous research by Samwel (2018), Khan (2011), Argp'n – Sanchez et al., (2003), Rahman et al., (2015), and Bassie et al., (2013).

# b. Effect of Cost Control on Cost of Revenue

**Hypothesis 5:** Accepting Ho and rejecting H5 is necessary when the probability value is above the threshold level of 0.05, as in the case of 0.2954. This outcome implies that cost control has no impact on revenue cost. The t-value of 1.070632 < 1.96 supports this conclusion, which may seem unusual but can be logically explained by the purpose of cost control. Construction projects are typically developed within a predetermined budget, hence the observed relationship.

The success of a project hinges on its timely and safe delivery, as per established quality standards and budgetary constraints. To avoid cost overruns, budget adherence is critical for each activity. While some studies have found no impact of cost control on revenue, others have shown the efficacy of cost control measures in reducing excessive budgets and overhead costs, resulting in profit maximization. Notably, Malkhanti, Premahal, and Mudalige (2017) emphasize the importance of cost control practices in minimizing cost overruns. Conversely, Ghafeer, Abdul Rahman, Mazahrih (2014), Akem (2017), Mutya (2018), Bavadekarl (2020), and Al-Shattarat (2021) suggest otherwise.

# c. Effect of Training & Development, and Cost Control together on Profitability (Gross Profit)

**Hypothesis 6:** With a probability value of less than 0.05, the hypothesis Ho is dismissed and H6 takes precedence. In simpler terms, it can be deduced that the joint implementation of training & development and cost control has a significant impact on gross profits. An impressive coefficient of determination at 92.58 percent confirms this impact, with only 7.42 percent of the total effect unaccounted for by the investigated variables. The F test result, with a probability of 150.7574 greater than 1.96, further emphasizes the significance of this effect.

The coefficient for training and development is a positive 275.89, indicating a direct correlation with gross profit. This finding aligns with studies by Argp'n - Sanchez et al. (2003), Bassie et al. (2013), Rahman et al. (2015), Ghafeer, Abdul Rahman, and Mazahrih (2014), Akem (2017), Mutya (2018), Bavadekarl (2020), Al-Shattarat (2021), and Malkhanti, Premahal, and Mudalige (2017), all of which suggest that combining training and development with cost control measures can have a significant impact on a company's profitability.

# d. Effect of Income on Probability (Gross Profit)

**Hypothesis 7:** If Ho is rejected or H7 is accepted due to the probability value being 0.000 < 0.05, then it can be gathered that income (X3) is affecting gross profit (X5). The t value of 30.78418 > 1.96 indicates the significance of this effect. Revenue is the primary

component of gross profit - the difference between net sales and cost of goods sold (Niswonger et al., 1999), or the profit gained before deducting company expenses (Kasmir, 2012), or the discrepancy between sales revenue and goods sold cost (Munawir, 2012). The profitability ratio called the gross profit margin ratio or Gross Margin Ratio in short compares the gross margin of a company to its revenue. From this, it can be seen how much profit is earned from each dollar of revenue that comes in after the goods have been paid for. The ratio is essentially the percentage of a company's gross profit after fulfilling its Cost of Goods Sold (COGS). This information has been provided by Corporate Finance Institute and was last referenced in 2021. Accepted from the above discussion is the influence of income on gross profitability. This concurs with Post's (2019) and Wulandari's (2017) discoveries, but contrasts with Ermaya, Priatna, and Alfiani's (2016) determinations.

#### e. Effect of Cost of Revenue on Profitability (Gross Profit)

**Hypothesis 8**: Rejected is Ho, and accepted is H8, when the probability value is less than 0.05, specifically 0.000. From this, it can be deduced that the cost of revenue has an impact on gross profit. The impact's weight is indicated by the t value, which is larger than 1.96 and stands at 24.14240, implying significance.

To create the goods or services sold, the cost of revenue must be calculated. This includes expenses for labor, materials, and overhead. Cost management aims to keep this cost below net income, even if this means slipping significantly below net sales. Achieving profitability is heavily impacted by reducing operating expenses or speeding up inventory and receivables turnover. The opinions of Al-Hanini (2018), Post (2019), and Wulandari (2017) contribute to understanding the effect of the cost of revenue on profitability (gross profit), as evidenced in the preceding discussion.

# f. Effect of Revenue & Cost of Revenue together on Profitability (Gross Profit)

**Hypothesis 9:** When the probability value is less than 0.05 (0.000), H9 is accepted and Ho is rejected. This shows that the combination of income and cost of revenue has an impact on gross profit. The coefficient of determinant is at 100 percent, proving that both factors have a significant impact. The level of significance is indicated by an F value of 6.82E+29, which surpasses 1.96. This points to a highly convincing result. Other factors lose their impact as the influence space dwindles, conforming to the formula where gross profit equals income minus revenue cost.

# g. Effect of Income on Profitability (Net Profit)

**Hypothesis 10:** Rejecting the null hypothesis (Ho) and accepting H10 requires a probability value of below 0.05, which indicates that income has an effect on net income. This effect is considered significant since the t value of 10.58105 is greater than 1.96. Thus, it can be concluded that income has a noteworthy impact on net income.

The profitability measure known as net profit refers to the profit that remains after deducting costs, which consists of the company's expenses and taxes in a certain period (Kasmir, 2015). Calculated as the percentage of each sales dollar left after all expenses have been deducted, including taxes, interest, and preferred stock dividends, the net profit margin is derived by dividing net income available to shareholders by total income (Gitman & Zutter, 2015). The main determinant of the net profit margin, hence profitability, is net income, which has been found to significantly impact profitability in studies conducted by Wulandari (2017), Post (2019), Suhanto, and Susanti (2020), though this differs from the findings of Ermaya, Priatna, and Alfiani (2016).

#### h. Effect of Cost of Revenue on Profitability (Net Profit)

**Hypothesis 11**: Rejecting Ho and accepting H11 happens when probability values lie between 0.000 and 0.05, indicating that the cost of revenue has an impact on net income. This effect is demonstrated by the t value of 9.898922, which is significantly greater than 1.96, highlighting the magnitude of the impact.

In conclusion of the previous discourse, it was established that the cost of revenue has an impact on gross profit, while the following discussion established that net income is the profit derived after deduction of costs borne by the company, including taxes, during a particular period. Thus, the cost of revenue ultimately affects net income, a finding consistent with Wulandari (2017) and Post (2019), although it differs from the conclusion reached by Ermaya, Priatna, and Alfiani (2016).

#### i. Effect of Revenue & Cost of Revenue together on Profitability (Net Profit)

**Hypothesis 12:** When the probability value is less than 0.05 but greater than 0.000, the null hypothesis is discarded, and the alternative hypothesis is accepted. In this case, it implies that the net income is impacted by the combined influence of income and cost of revenue. The coefficient of determination stands high at 89.66 percent, signifying a strong impact of these two factors on net income, with only 10.34 percent of the influence exerted by other variables. This impact's significance is confirmed by an F value of 105.0666, which is greater than the significant value of 1.96.

After careful analysis, it was determined that income and cost of revenue significantly impact net income. The research conducted by Ermaya, Priatna, and Alfiani (2016), Wulandari (2017), and Pasca (2019) all reached the same conclusion regarding the joint effect of these factors on net income.

# j. Effect of Training & Development, and Cost Control together on Profitability (Net Profit)

**Hypothesis 13:** When the probability value is less than 0.05 (0.000), Ho is rejected and H13 accepted, indicating that training & development in conjunction with cost control has a net income effect. The coefficient of determination, 81.74 percent, indicates a compelling impact on gross profit. However, 19.26 percent of the factors that affect net income remain unexamined. The F value of 54.72597 (>1.96) is significant, showing the effect's importance. The 81.74 percent determination cements the convincing power of training & development and cost control. Nonetheless, 19.26 percent of costs and other expenditures contribute to the outcome.

# k. The Effect of Income on Profitability (Net Operating Profit After Tax) or NOPAT

**Hypothesis 14:** Rejecting Ho or accepting H14 is warranted when the probability value is less than 0.05 but greater than 0.000. This, in turn, implies that the net income after tax or NOPAT can be influenced by income. The degree of significance of this influence is reflected in the t value of 18.31136 which is greater than the significant figure of 1.96.

EBIT, standing for earnings before interest and tax, differs from NOPAT, which is the net profit after factoring in taxable obligations. Brigham & Daves (2002) define NOPAT as EBIT multiplied by (1 - Tax rate). The primary distinction between the two is that NOPAT factors in tax but not interest, while EBIT does not factor in either interest or tax. Therefore, any declaration affecting EBIT, as per Suhanto and Susanti (2020), would also affect NOPAT as described above. As Wulandari (2017) and Post (2019) have discovered, operating income has a significant positive impact on net profit. Since NOPAT can also be calculated using the net profit plus interest costs, this further proves that income has an effect on NOPAT.

# 1. Effect of Cost of Revenue (X4) on Profitability (NOPAT)

Hypothesis **15**: A rejection of the null hypothesis, Ho, or an acceptance of H15 occurs when the probability value is less than 0.05. This finding indicates that the cost of revenue significantly impacts NOPAT, corroborated by the t value of 16.58566, which exceeds the significant threshold of 1.96.

As per the previous discussion, the impact of revenue cost on profitability was examined. While Wulandari (2017) and Post (2019) agreed on the existence of such an effect, Ermaya, Priatna, and Alfiani (2016) held a contrary opinion. Since net income is the primary constituent of NOPAT, it follows that revenue cost impacts NOPAT as well. This is further substantiated by the statistical test results. It is worth noting that NOPAT can be computed by deducting interest cost from net income. Thus, the effect of revenue cost is evident on NOPAT.

#### m.Effect of Revenue & Cost of Revenue together on Profitability (NOPAT)

**Hypothesis 16:** Rejecting Ho and accepting H16 becomes possible when the probability value equals or is less than 0.000 <0.05. This implies that the combined impact of income and cost of revenue on NOPAT is evident. The determinant coefficient of 92.83 percent confirms their significant influence. External variables are left with only 7.17 percent of the impact space. The F value of 156.4764 reinforces the significance of their effect. Consequently, both income and cost of revenue have a clear impact on NOPAT. Only a fraction of the influence could be attributed to external factors, perhaps due to low capital used by contractors who prefer leased equipment over investments.

# n. Effect of Training & Development, and Cost Control together on Profitability (NOPAT)

**Hypothesis 17:** When the probability value is less than 0.05, specifically 0.000, Ho is **rejected** and H17 is accepted—proving the collective impact of training & development and cost control on NOPAT. The determinant coefficient, which sits at 90.43 percent, is a testament to the compelling influence of these factors. However, there's a 9.57 percent gap left for the impact of other variables that have yet to be evaluated. The F value of 114.4387 (significant) further underscores the significance of this effect.

The calculation for NOPAT involves deducting the tax rate from EBIT or adding interest after modifying the tax rate. Essentially, net income significantly influences NOPAT. This implies that any changes in training & development and cost control measures that alter net income will also impact NOPAT. The strong correlation between training & development and cost control and NOPAT is evidenced by the determinant value of 90.43 percent.

# o. The Effect of Gross Profit on Economic Value Added or EVA

**Hypothesis 18:** Rejecting Ho and accepting H18 happens when the probability value lies between 0.000 and 0.05. A conclusion can then be drawn that the EVA is impacted by the gross profit. The effect is deemed significant, as the t value of 5.418721 surpasses the threshold of 1.96.

EVA, or Economic Value Added, is calculated using the formula  $EVA = NOPAT - \{Capital Employed X WACC\}$ . In turn, NOPAT is derived from subtracting tax from EBIT, which represents operating profit or labor acquired from gross profit after

excluding all other expenses except tax and interest. According to Suhanto and Susanti (2020), EBIT is correlated with gross profit, a finding supported by Wulandari (2017) and Post (2019), but not by Ermaya, Priatna, and Alfiani (2016). Kijewska's (2016) research proves that NOPAT and sales figures have the most significant impact on EVA. Moreover, as Gross Profit factors into both EBIT and NOPAT, it plays a crucial role in determining EVA.

# p. Effect of Net Income on EVA

**Hypothesis 19:** Rejecting Ho and accepting H19 occurs when the probability value is less than 0.05, specifically at 0.000. This confirms that an impact of net income (X6) on EVA (Y) exists. Further, with a t value of 6.136644, which is greater than 1.96 (significant), the significance of this effect is demonstrated.

In the same vein, net income holds sway over EVA just as gross profit does. By subtracting expenses from gross profit and EBIT, net income can be derived using the formula: NOPAT = Net Profit + {(1-Tax rate) X Interest Expense}. This calculation outcome can be plugged into the EVA formula:  $EVA = NOPAT - \{Capital Employed X WACC\}$ . Consequently, it is evident that net income has a bearing on EVA. According to Sihaloho et al.'s (2017) study, the largest NOPAT value is linked to an increase in net income after tax. Hence, EVA is influenced by net income, as inferred from the formula underpinning its computation.

# q. Effect of NOPAT on EVA

**Hypothesis 20:** In statistical analysis, rejecting Ho and accepting H20 happens when the probability value is less than 0.05 but greater than 0.001. This suggests a direct effect of NOPAT on EVA. The significance of this effect is denoted by a t value of 4.834355, which is greater than the cutoff value of 1.96 and is therefore considered statistically significant.

To calculate EVA, the EVA formula is applied: EVA = NOPAT - (Capital Employed X WACC). The value of EVA hinges on three key factors: NOPAT, Capital Employed, and WACC. Essentially, NOPAT is the determining factor in the value of EVA, meaning that changes in NOPAT will have a direct effect on EVA. These conclusions were drawn from research conducted by Kijewska (2016) and Sihaloho et al. (2017).

# CONCLUSION

The study examined various factors that impact employee performance, income, cost of revenue, profitability, and economic value added. Training and development were found to positively influence employee performance and income. However, cost control did not have a significant impact on employee performance. When training and development were combined with cost control, there was a notable increase in employee performance and profitability. Additionally, income and cost of revenue independently affected gross profit, net income, and net operating profit after tax (NOPAT). Joint efforts towards training and cost control positively impacted NOPAT. Finally, both gross profit and net income were linked to economic value added (EVA), but NOPAT had the strongest influence on EVA.

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