

# **The Effect of Online Training And Team Building Programs On Employee Satisfaction And Productivity At Pt Carsurin TBK**

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**Abstract:** *This study aims to analyze and prove the effect of online training on job satisfaction, analyze and prove the effect of online training on productivity, analyze and prove the effect of team building on job satisfaction, analyze and prove the effect of team building on productivity, and analyze and prove the effect of job satisfaction on productivity. The research was conducted at PT Carsurin Tbk, Samarinda branch, East Kalimantan. This is a quantitative study, with a population of 60 employees in various positions, ranging from Officer, Team Leader, and Head of Department. The research design uses an explanatory research approach. The sampling technique used is saturated sampling, where all employees of PT Carsurin Tbk, Samarinda branch, are taken as samples. Data collection was conducted by distributing questionnaires. The data analysis technique used in this study is the SEM (Structural Equation Modeling) method with PLS (Partial Least Square) using Smart PLS 3.0 software. The results of this study indicate that online training has a positive and significant effect on job satisfaction, online training has a positive but not significant effect on productivity, team building has a positive and significant effect on job satisfaction, team building has a negative but not significant effect on productivity, and job satisfaction has a positive and significant effect on productivity.*

**Keywords:** *Online Training, Job Satisfaction, Productivity, Team Building*

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## **I. INTRODUCTION**

Employees are one of the most important assets in an organization. In a dynamically changing and increasingly competitive business world, businesses need to understand that creative, innovative, skilled and happy employees can make a significant contribution to the organization to achieve the goals set by the organization. Employees with high productivity will make the organization able to achieve goals more effectively and efficiently. Therefore, both business practitioners and academics in the field of human resource management continue to study the variables that affect employee productivity. PT. Carsurin, Tbk is one of the companies in Indonesia that actively takes advantage of online training opportunities. PT. Carsurin, Tbk was established in 1968 in Jakarta and there are a total of 19 branch offices or more, then for laboratories as many as 17. The field of PT. Carsurin, Tbk itself is engaged in services as well as third parties independently for various industries, including coal, minerals and metals, oil and gas, petroleum and petrochemicals, maritime and offshore. PT Carsurin, Tbk offers inspection, testing, certification and verification services (carsurin.com, 2024). The online training provided by PT. Carsurin, Tbk includes technical training aimed at increasing knowledge and skills in certain fields, and soft skills such as customer service for all elements of employees. Some online training schedules are fixed once a week, some are axial. However, because the implementation is often within effective working hours, the employee participation rate is relatively low, especially for employees who work in field areas such as surveyors. Based on a pre-research interview with one of the informants, it is known that not all employees participate in all training programs offered by PT Carsurin, Tbk. There are some employees who can take part in dozens of trainings a year, but there are only a few employees who take part in a few trainings. On the other hand, employees tend to focus more on the work they do rather than paying attention to the training that takes place. Not infrequently during the posttest, employees imitate the answers of other colleagues, so that the average posttest score is satisfactory, but does not really reflect the employee's individual understanding of the online training material.

The challenge in this strategy can be exemplified is the system that must be migrated and integrated with the device used, namely laptops, which is not uncommon after being migrated, there is unread data or errors, then new habits emerge by conducting online meetings and training using applications such as Google Meet, Zoom, Microsoft Teams, etc. This also indirectly changes previous habits. In addition to online training, PT. Carsurin also has a team building program. As a service company, PT. Carsurin Tbk depends on the client's order. A project-based business environment that is full of pressure of target deadlines and various client requests, requires organizations to have a solid and productive internal work team to maintain client satisfaction. Therefore, the team building program is the next important variable in influencing employee satisfaction and productivity.

Dyer, Jr., et.al (2013) in his book entitled *Team Building* emphasizes the importance of understanding team building. According to them, currently poor team performance is a major concern because most of the work done in companies today is done in a team environment. One reason is that products and services have become increasingly complex and require a wide range of skills and technologies. No one can do everything on his own; developing, producing, and selling increasingly complex products. This means that groups of individuals with complementary knowledge must coordinate effectively to succeed. This requires teamwork. Additionally, in the global economy, individuals must collaborate across cultural, organizational, and geographic boundaries to achieve their goals. Therefore, to be a high-performing company in a competitive landscape basically requires a high-performing work team. Team Building activities were carried out for two days. On the first day, the employees participated in training materials on Empathy. This aims to prioritize empathy between each other, especially in the process of carrying out work. So that everyone knows and understands what their strengths and weaknesses The second day of Team Building activities was carried out outdoors involving all employees. The activities on the second day were more about games involving groups, to foster cooperation and cohesion. Each group consists of a variety of employees with different divisions. So that they can get to know each other better, which later in doing their daily work is expected to communicate and coordinate with each other also goes well.

Based on the background that has been explained above, the formulation of the problem can be described as follows: (1) what is online training have a positive and significant effect on job satisfaction?; (2) what is online training have a positive and significant effect on work productivity?; (3) what is the team building program have a positive and significant effect on job satisfaction?; (4) what is the team building program have a positive and significant effect on work productivity; and (5) what is satisfaction have a positive and significant effect on work productivity?.

## **II. LITERATURE REVIEW**

### **Online Training**

Mangkunegara (2016) states that training is a short-term educational process in which non-management implementers acquire technical knowledge and skills to achieve limited goals. Training can be viewed from a narrow or broad perspective and is defined by Mathis (2004) as a process that allows a person to acquire certain abilities to help achieve organizational goals. Training may provide employees with certain knowledge and skills that can be used in work activities. Training is an activity to develop and strengthen employees, by improving their skills, knowledge or knowledge, and behavior (Kasmir 2016).

### **Team Building**

Fapohunda (2013) explained that team building includes various activities that are designed to improve team performance or performance. The program aims to encourage the best in a team to ensure self-development, positive communication, leadership, and teamwork skills to solve problems. This philosophy emphasizes that employees are members of groups that depend on each other, rather than as individual workers. According to Sidiq & Abdullah (2022) in Julianti and Widyastuti (2023), team building activities can also increase the awareness and attitude of individual employees in certain groups to have the desire and ability to work together and synergize in carrying out work activities as a team in a group. This is done as an effort to facilitate a comfortable and conducive work environment so that it is effective in forming a working group to carry out work. Team building is an approach system that aims to deepen the level of effectiveness and satisfaction of each individual in the group which helps to increase cooperation, especially in teams that handle projects and organizations that are matrix in nature (Tampubolon, 2020).

### **Job Satisfaction**

Lu, While and Barriball (2005) explain job satisfaction as an affective orientation that employees have towards their work. This can be considered as a thorough feeling about the various aspects related to his work. The affective disposition of job satisfaction consists of two aspects: positive affinity and negative affection. High energy, strong desire, and pleasurable engagement indicate positive affectivity while stress, unpleasant engagement, and nervousness indicate negative affectivity (Judge and Larsen, 2001).

On the other hand, Van der Voordt (2004) describes employee satisfaction as a reference of the work environment that meets the wants and needs of employees. Things can be related to a job (content, complexity, skills and knowledge needed); social work environment (such as co-workers, management style, working conditions such as salary, leave arrangements, and career prospects); physical work environment (workplace, lighting, scenery, sunlight, etc.). Non-work-related aspects, such as the employee's personal life, can also play a role. Therefore, in measuring the change in employee satisfaction resulting from workplace innovation, we must be careful in taking into account the possible influence of many factors. According to Kartikasari & Djastuti, (2017) job satisfaction is defined as a worker's emotional state that is pleasant or unpleasant while working. Evaluations, attitudes, or feelings from individuals in this case are employees towards the work as a whole, as well as social relations in the work area, and in work are some of the factors that affect job satisfaction. Then, Yudha (2018) explained that job satisfaction is an employee's emotional state where there is or is not a certain point between the reciprocal value expected from employees.

### **Work Productivity**

Blocher, Chen, and Lin (2000:847) stated that productivity is a relationship between the output of the number of outputs and the need for the number of inputs to be produced. Meanwhile, Husien Umar (1999:9) defines productivity as a comparison of the results achieved (output) and the total used (input) of existing resources. Then, according to Wijaya (2020) in Aswaruddin, et.al (2024), work productivity is an effective measure using comparing the quality and quantity of the origin of a person's work energy in one unit when achieving the result or performance of work effectively and efficiently with the origin of the power used. This is illustrated by how many materials and time in the work process to achieve the quantity and quality of the work.

### **Relationship Between Variables**

#### **Online Training on Job Satisfaction**

Research by Stephen and Bowley (2007) explains that employee training can update employee skills, improve professionalism and increase commitment and job satisfaction. Gazioglu and Tansel (2002) found a significant positive association between training and job satisfaction in the UK using a sorted Probit estimate. Asaju (2008) explained that if employees are trained at a low level, it will increase their tendency to leave the organization, while high-level training increases employee satisfaction and focuses them on staying in the organization. Furthermore, Asgarova (2019) who raised research entitled Impact of Employee Training on Employee Job Satisfaction and Achievement: A Case of Turkish Manufacturing Industry found that training had a positive and significant effect directly on employee work achievement/productivity. In addition, training also has a positive and significant indirect effect on achievement/productivity through job satisfaction. On the other hand, Amar, et.al (2021) who examined the impact of compensation, training, and job motivation on the job satisfaction of Grab Drivers found that compensation had a significant positive effect on job satisfaction, while training and job motivation did not have a significant effect on the job satisfaction of Grab Drivers in the region. This is in line with Hoekstra (2013) which tested online training on lecturers' job satisfaction in higher education institutions, also found no significant relationship between coaching and job satisfaction, although there was a relationship between age and job satisfaction.

H1: Online Training has a positive and significant effect on Job Satisfaction

#### **Training on Productivity**

Theoretical and empirical studies have shown a link between training and work productivity. According to Nda and Frad (2013), employees are an absolute resource in an organization, so the need for continuous learning and renewal of skills and knowledge is invaluable due to organizational, technological and social dynamics. Thus, in order for an organization to achieve an optimal return on its human capital investment, it is important for the organization to effectively manage its training and development programs. Training and development are instruments to help employees explore their abilities. Therefore, training and development are important to increase employee work productivity. In addition, Indriastuti (2017) found that education and training directly affected productivity by 10.89%, job competencies also had a direct effect on productivity by 6.40%, education and training directly affected job placement by 9.80%, then dominantly position competencies directly affected job placement by 28.84% and job placement directly affected to productivity of 9.80%.

H2: Online Training has a positive and significant effect on work productivity

#### **Team Building on Job Satisfaction**

Achieving a high level of employee job satisfaction in a team environment is a significant challenge. Various aspects contribute to the enjoyment experienced by team members in a collaborative environment. These elements include the awards received after successfully completing the task, the quality of communication between the team members and their leaders, the size of the team, and the duration it takes to complete the assigned

task. Ahmad and Abdullah (2023) found that teamwork, employee diversity, and communication have a positive and significant effect on job satisfaction, but employee diversity has the lowest r-value among these three variables.

H3: Team Building has a positive and significant effect on job satisfaction

### Team Building on Work Productivity

Hadipranata and Sudardjo (1999) found that team formation had a positive and significant effect on work ethic and contributed highly to work productivity of 87.5%. Baharom, et.a in 2022 found that team formation has a positive and significant effect on employee work productivity. The implication of the study is that employees who work in teams are more productive than those who work individually, as team formation improves compatibility and harmony between members, which in turn increases the productivity and success of the company.

According to Anog, et.al (2023), team building activities can increase organizational efficiency and productivity because of its positive effect on relationships established in the work environment. If organizations simplify team building as a regular part of upskilling and employee development, productivity in the workplace will inevitably materialize.

H4: Team Building has a positive and significant effect on Work Productivity

### Job Satisfaction on Work Productivity

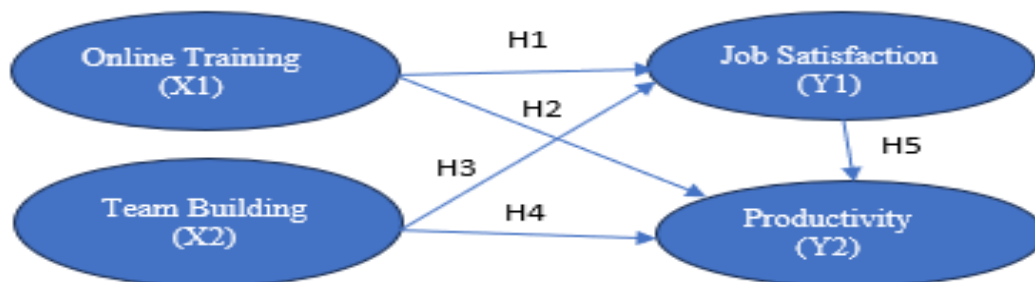
As previously concluded, job satisfaction is a feeling that employees feel both pleasantly and unpleasantly which is influenced by aspects such as the characteristics and burden of the work itself, the work environment, social relations in the workplace, and the expectation of feedback to employees from what has been done. Rohan & Madhumita in Nda and Fard (2013) define employee productivity as an economical measure of output per unit of input. Or in other words, it is a level of measurement of how efficient an employee is in producing output or completing the tasks assigned to him. The correlation between the two is that if an employee is satisfied with his or her job, he or she will have a tendency to be more productive. This statement is supported by research conducted by Tentama, et.al (2019) found that job satisfaction has a positive and significant effect on work productivity by 18.2%.

H5: Job Satisfaction Has a Positive and Significant Effect on Work Productivity.

### Research Conceptual Framework

From the relationship between the variables mentioned above, the following conceptual model of research can be drawn:

Figure 1. Research Conceptual Framework



## III. RESEARCH METHOD

### Operational of Definitions

#### Online Training

In this study, what is meant by online training is all forms of activities and training programs organized by PT Carsurin Tbk online to employees to provide learning, knowledge, and skills in order to understand and develop skills or competencies for employees. Indicators to measure training variables according to El-Hajjar and Alkhanaizi (2018) are as follows:

- Training Content
- Training Environment
- Training Schedule
- presentation style

### **Team Building**

In this study, what is meant by Team Building is the activity of groups that interact with each other, in this case PT Carsurin Tbk employees which are carried out to increase productivity in doing tasks to achieve the goals of PT Carsurin, Tbk. The variable indicators of Team Building according to Eduardo Salas and James E Driskell (1999) are as follows:

a. Goal Setting

Namely the information received by related employees about the company's value of PT Carsurin Tbk.

b. Interpersonal Relationships

That is the emergence of the interpretation of PT Carsurin Tbk employees to the information absorbed.

c. Problem solving

That is to compare the understanding that employees have just gained with their norms.

d. Role Clarification

That is the emphasis on the communication process in the team at PT Carsurin, Tbk regarding the role of each employee.

### **Job Satisfaction**

In this study, what is meant by job satisfaction is a feeling experienced by PT Carsurin Tbk employees, both pleasant and unpleasant. This consists of the influence of the work environment, social relations in the workplace, and the expectation of reciprocity to workers for what has been done. This consists of the influence of the work environment, social relations at PT Carsurin Tbk, and the expectation of reciprocity to PT Carsurin employees for what has been done. According to Van der Voordt (2004); Kartikasari & Djastuti (2017); Yudha (2018), it can be concluded that the indicators of Job Satisfaction are as follows:

a. Characteristics of work

b. Compensation

c. Career prospects

d. Physical work environment

e. Social work environment

### **Work Productivity**

Work productivity is the level of how effective and efficient an employee at PT. Carsurin, Tbk utilizes resources in producing *outputs* or completing tasks assigned to it. The variable indicators of work productivity according to Aswaruddin, et.al (2024) are as follows:

a. Ability

b. Determination (motivation) to improve the results achieved

c. Morale

d. Self-development

### **Population and Sample**

The population used in this study is 60 employees of PT Carsurin Tbk Samarinda Branch. The sample is part of the number and characteristics possessed by the population (Sujarweni, 2019:105). The selection of the sample is an option because of the limitations of researchers in conducting research from various aspects, such as funds, time, manpower and also a very large population. Therefore, the samples taken must represent all companies of PT Carsurin Tbk. Sample collection techniques are carried out using saturated sampling techniques. Where the members of the employee population of PT Carsurin Tbk Samarinda branch were sampled with a population of 60 employees or in the sense of all employees who were sampled.

### **Analysis Method**

Sugiono (2019:148) explained about inferential analysis, which is a statistical method used to examine sample data and produce population conclusions. In this inferential analysis, the researcher used the Partial Least Square (PLS) test tool as a data collection method. Data analysis techniques are grouped based on the same answer, PLS is a Structural Equation Modeling (SEM) equation model based on components or variants. (Haryono, 2016:14) describes the purpose of the analysis using Partial Least Square (PLS) is to evaluate the predictive relationship between constructs by looking at whether there is an influence or relationship between constructs (latent or concepts that can be measured and observed).

IV. ANALYSIS AND DISCUSSION

Structural Equation Modelling (PLS-SEM)

Evaluation of Measurement Model (outer model)

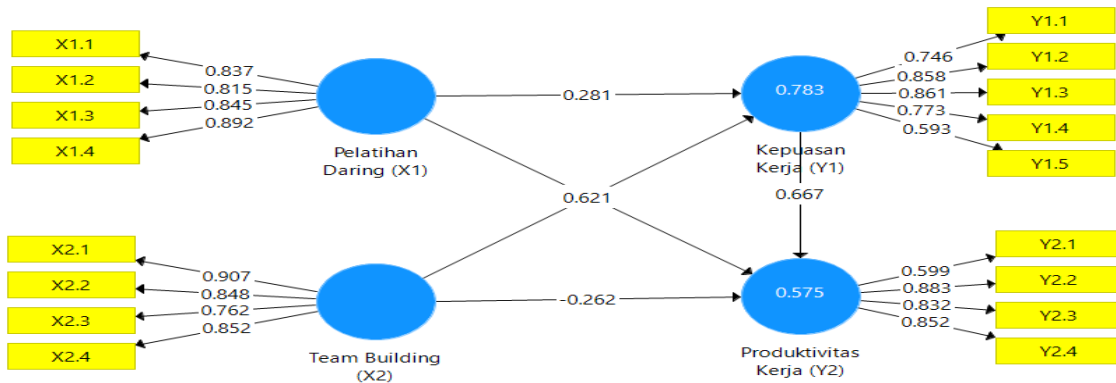


Figure 2. PLS Algorithm Model (Outer Model)

1. Convergent Validity

Convergent validity is used to prove that the statements on each latent variable in this study are able to be understood well by the respondents as intended by the researcher. When the value *outer loading* more than 0.70 (>0.70) then the indicator can be used. The Average Variance Extracted (AVE) value that meets the minimum criteria is greater than 0.50 (>0.50). If in the test there is a value *outer loading* below 0.70 indicators can still be used provided that the minimum loading value is greater than 0.40 (Loading >40) and the AVE value is more than 0.50 (AVE >0.5) so the variable can be said to be valid. If it is less than 0.40 then it should be eliminated (Hair *et al.*, 2022, p.126)

Table 1. Outer Loading Table

| Variable          | Indicators | Loading (> 0.50) | AVE (> 0.50) | Information |
|-------------------|------------|------------------|--------------|-------------|
| Job Training      | X1.1       | 0,837            | 0.719        | Valid       |
|                   | X1.2       | 0,815            |              | Valid       |
|                   | X1.3       | 0,845            |              | Valid       |
|                   | X1.4       | 0,892            |              | Valid       |
| Team Bulding      | X2.1       | 0,907            | 0.712        | Valid       |
|                   | X2.2       | 0,848            |              | Valid       |
|                   | X2.3       | 0,762            |              | Valid       |
|                   | X2.4       | 0,852            |              | Valid       |
| Job Satisfaction  | Y1.1       | 0,746            | 0.597        | Valid       |
|                   | Y1.2       | 0,858            |              | Valid       |
|                   | Y1.3       | 0,861            |              | Valid       |
|                   | Y1.4       | 0,773            |              | Valid       |
|                   | Y1.5       | 0,593            |              | Valid       |
| Work Productivity | Y2.1       | 0,599            | 0.639        | Valid       |
|                   | Y2.2       | 0,883            |              | Valid       |
|                   | Y2.3       | 0,832            |              | Valid       |
|                   | Y2.4       | 0,852            |              | Valid       |

Source: Primary Data, Processed by Researchers (2024)

In Table 1 above, it is known that the outer loading value of each indicator is > 0.5, which means that all indicators of this study have met the criteria for convergent validity.

2. Discriminant Validity

Discriminatory validity occurs when two different instruments that measure two predicted constructs that are not correlated produce scores that are indeed not correlated. This test aims to test to how far the latent construct is completely different from other constructs. A high value of discriminant validity gives an indication that a construct is unique and capable of explaining the phenomenon being measured. One of the criteria to prove that

the latent variable of the study meets the requirements for the validity of discrimination is through the cross loading value, if the loading value of each item against the construct is greater than the cross loading value (Ghozali and Latan, 2015).

**Table 2. Outer Loading**

| Indicators | Job Satisfaction (Y1) | Online Training (x1) | Work Productivity (Y2) | Team Building (x2) |
|------------|-----------------------|----------------------|------------------------|--------------------|
| X1.1       | 0,766                 | <b>0,837</b>         | 0,566                  | 0,797              |
| X1.2       | 0,652                 | <b>0,815</b>         | 0,619                  | 0,725              |
| X1.3       | 0,611                 | <b>0,845</b>         | 0,517                  | 0,735              |
| X1.4       | 0,817                 | <b>0,892</b>         | 0,625                  | 0,822              |
| X2.1       | 0,887                 | 0,851                | 0,722                  | <b>0,907</b>       |
| X2.2       | 0,676                 | 0,812                | 0,553                  | <b>0,848</b>       |
| X2.3       | 0,653                 | 0,670                | 0,413                  | <b>0,762</b>       |
| X2.4       | 0,707                 | 0,723                | 0,457                  | <b>0,852</b>       |
| Y1.1       | <b>0,746</b>          | 0,625                | 0,505                  | 0,636              |
| Y1.2       | <b>0,858</b>          | 0,731                | 0,670                  | 0,699              |
| Y1.3       | <b>0,861</b>          | 0,727                | 0,679                  | 0,744              |
| Y1.4       | <b>0,773</b>          | 0,692                | 0,499                  | 0,775              |
| Y1.5       | <b>0,593</b>          | 0,459                | 0,497                  | 0,508              |
| Y2.1       | 0,346                 | 0,292                | <b>0,599</b>           | 0,388              |
| Y2.2       | 0,642                 | 0,609                | <b>0,883</b>           | 0,567              |
| Y2.3       | 0,625                 | 0,488                | <b>0,832</b>           | 0,466              |
| Y2.4       | 0,685                 | 0,711                | <b>0,852</b>           | 0,634              |

Source: Primary Data, Processed by Researchers (2024)

Based on Table 2 above, it is known that the outer loading value of each latent variable indicator is greater than the outer loading value of other blocks (constructs); this means that all indicators of this study are declared valid.

### 3. Reliability Test

The reliability test was used to measure the consistency of respondents in answering statement items in the questionnaire. In this study, reliability was tested using Cronbach's alpha value. A test of the reliability of the research construct is needed to determine whether when used twice to measure the same symptom, it will provide relatively consistent measurement results. The criteria for reliability are met if it has a Cronbach's alpha value of > 0.7 (Dahlan et al. 2014). The Cronbach's alpha value of this study variable is shown in Table 5.7 below, where it can be seen that all variables show a Cronbach's alpha value > 0.7 so that it is declared reliable.

**Table 3. Reliability Consistency Test**

| No. | Variable               | Cronbach's Alpha | Information |
|-----|------------------------|------------------|-------------|
| 1.  | Online Training (x1)   | 0,870            | Valid       |
| 2.  | Team Building (x2)     | 0,865            | Valid       |
| 3.  | Job Satisfaction (Y1)  | 0,826            | Valid       |
| 4.  | Work Productivity (Y2) | 0,811            | Valid       |

Source: Primary Data, Processed by Researchers (2024)

### Inner Model Analysis

For endogenous constructs, the structural model in PLS is evaluated using the R<sup>2</sup> value, path coefficient or t-values of each path to test the significance between constructs in the structural model. In the R<sup>2</sup> test, the higher the R<sup>2</sup> value, the better the prediction model of the research model. The R<sup>2</sup> value in this study is shown in Table 3.

**Table 4. Determination Test**

| It | Variable               | Adjusted R-Squared |
|----|------------------------|--------------------|
| 1. | Job Satisfaction (Y1)  | 0,775              |
| 2. | Work Productivity (Y2) | 0,552              |

Source: Primary Data, Processed by Researchers (2024)

Structural model No. 1 places job satisfaction (Y1) as endogenous variables, while online training (X1) and team building (X2) are exogenous variables. With an adjusted R<sup>2</sup> value on job satisfaction (Y1) of 0.775, it is explained that job satisfaction (Y1) can be explained by online training (X1) and team building (X2) by 77.5%. Structural model No. 2 places work productivity (Y2) as endogenous variables, while online training (X1), team building (X2), and job satisfaction (Y1) are exogenous variables. With an adjusted R<sup>2</sup> value on work productivity (Y2) of 0.552, it is explained that work productivity (Y2) can be explained by online training (X1), team building (X2) and job satisfaction (Y1) of 55.2%.

**Goodness of Fit Analysis**

Goodness Of Fit (GoF) is a single measure used to validate the combined performance of the measurement model (outer model) and the structural model (inner model) which can be seen from the Q-square predictive relevance (Q<sup>2</sup>) value. The Q<sup>2</sup> quantity has a value with a range of 0 ≤ Q<sup>2</sup> ≤ 1, where the closer to 1 the better the model is. Q<sup>2</sup> predictive relevance for structural models can be calculated, i.e.

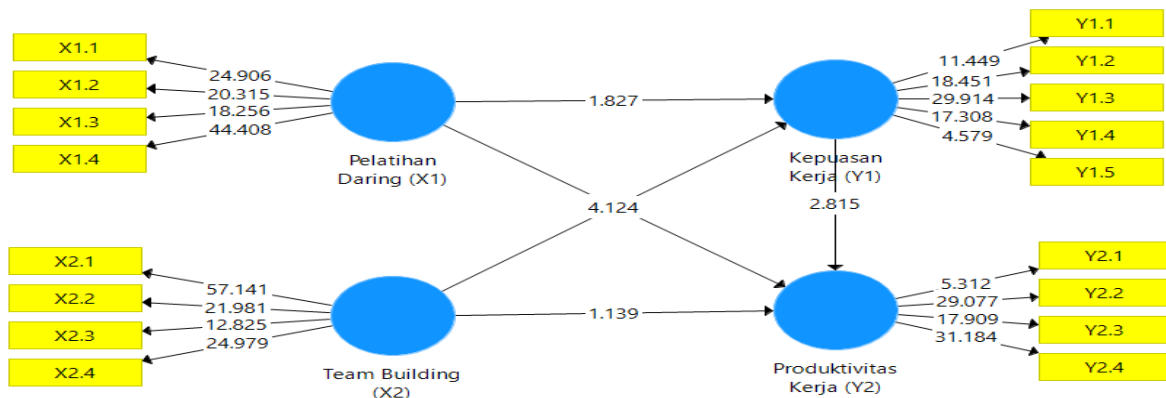
$$\begin{aligned}
 Q^2 &= 1 - [(1 - R^2_1) \times (1 - R^2_2) \times (1 - R^2_3)] \\
 &= 1 - [(1 - 0.775) \times (1 - 0.552)] \\
 &= 1 - (0.225 \times 0.448) \\
 &= 1 - 0.1008 \\
 &= 0.8992
 \end{aligned}$$

Based on the calculation above, a predictive relevance value of 0.8992 or 89.92% was obtained. This means that this research model can be used for hypothesis testing.

**Hypothesis Testing**

The hypothesis test was carried out by comparing the T-table value with the T-Statistics value from the bootstrapping test results. In the one-tailed hypothesis test, the hypothesis is accepted if the T-statistics value > T-table (1.64) with a p-value < 0.05.

**Figure 3 . Results of the Hypothetical SmarPLS Measurement Model**



**Table 5. Path Coefficients and Direct Influence Hypothesis**

| Variable  | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics ((O/STDEV)) | P Values     |
|---|---------------------|-----------------|----------------------------|--------------------------|--------------|
| Job Satisfaction (Y1) -> Work Productivity (Y2) | 0,667               | 0,650           | 0,237                      | 2,815                    | <b>0,003</b> |
| Online Training (X1) -> Job Satisfaction (Y1)   | 0,281               | 0,279           | 0,154                      | 1,827                    | <b>0,034</b> |
| Online Training (X1) -> Work Productivity (Y2)  | 0,363               | 0,376           | 0,276                      | 1,314                    | <b>0,095</b> |
| Team Building (X2) -> Job Satisfaction (Y1)     | 0,621               | 0,627           | 0,151                      | 4,124                    | <b>0,000</b> |
| Team Building (X2) -> Work Productivity (Y2)    | -0,262              | -0,255          | 0,230                      | 1,139                    | <b>0,128</b> |

Source: Primary Data, Processed by Researchers (2024).

Based on the results of the path coefficient obtained as shown in table 5.8 above, the hypothesis testing of this study can be described as follows:



**Hypothesis 1: Online Training (X1) has a Positive and Significant Effect on Job Satisfaction (Y1)**

- a. **Original Sample (O):** 0.281
- b. **T-Statistic:** 1,827
- c. **P-Value:** 0.034

With an original sample value of 0.281, a T-Statistic of 1.827 and a P-Value of 0.034 (less than 0.05), this hypothesis was accepted. This means that Online Training (X1) has a significant positive influence on Job Satisfaction (Y1).

**Hypothesis 2: Online Training (X1) has a positive and significant effect on Work Productivity (Y2)**

- a. **Original Sample (O):** 0.363
- b. **T-Statistic:** 1,314
- c. **P-Value:** 0.095

With the original sample value of 0.363, T-Statistic of 1.314 and P-Value of 0.095 (greater than 0.05), this hypothesis was rejected. This means that Online Training (X1) has a positive but not significant effect on Work Productivity (Y2).

**Hypothesis 3: Team Building (X2) has a positive and significant effect on Job Satisfaction (Y1)**

- a. **Original Sample (O):** 0.621
- b. **T-Statistic:** 4,124
- c. **P-Value:** 0,000

With an original sample value of 0.621, a T-Statistic of 4.124 and a P-Value of 0.000 (less than 0.05), this hypothesis was accepted. This means that Team Building (X2) has a significant positive influence on Job Satisfaction (Y1).

**Hypothesis 4: Team Building (X2) has a positive and significant effect on Work Productivity (Y2)**

- a. **Original Sample (O):** -0.262
- b. **T-Statistic:** 1,139
- c. **P-Value:** 0.128

With the original sample value of -0.262, T-Statistic of 1.139 and P-Value of 0.128 (greater than 0.05), this hypothesis was rejected. This means that Team Building (X2) has a negative and insignificant influence on Work Productivity (Y2). This shows that the relationship between team building (X2) and work productivity (Y2) is not unidirectional, but not significant.

**Hypothesis 5: Job Satisfaction (Y1) has a positive and significant effect on Job Productivity (Y2)**

- a. **Original Sample (O):** 0.667
- b. **T-Statistic:** 2,815
- c. **P-Value:** 0.003

With an original sample value of 0.667, a T-Statistic of 2.815 and a P-Value of 0.003 (less than 0.05), this hypothesis was accepted. This means that Job Satisfaction (Y1) has a significant positive influence on Job Productivity (Y2).

**Discussion**

**The Effect of Online Training on Job Satisfaction**

Based on data analysis, it is known that online training has a significant positive effect on job satisfaction. This means that the better the implementation of online training carried out by PT. Carsurin, Tbk will increase employee job satisfaction. These findings support the research of Gazioglu and Tansel (2002), Asaju (2008), and Asgarova (2019) who stated that training has an effect on job satisfaction. However, this study is not in line with the findings of Hoekstra (2013) and Amar, et.al (2021) who found that there was no significant influence between training and job satisfaction. Online training indicators that have an influence on job satisfaction include starting from the X1.4 indicator with a loading factor value of 0.892, followed by X1.3 with a loading factor value of 0.845, X1.1. with a loading factor value of 0.837 and X1.2 with a loading factor value of 0.815. Thus, the most dominant indicator is the presentation style, while the lowest is the training environment indicator. The implication of the findings of this study is that the training environment indicator obtains the lowest loading factor value, meaning that PT Carsurin, Tbk needs to ensure that employees are in a place and atmosphere that supports employee concentration/focus when participating in online training so that the expected learning goals of PT Carsurin, Tbk can be achieved. On the other hand, the presentation style indicator shows the highest loading factor value. This means that instructors or trainers who are able to deliver training materials in a dynamic, interesting

and easy-to-understand manner are the most important things in online training. This is interrelated, considering that online training is a training where the delivery of material is not carried out directly face to face, so that there is no direct interaction between the instructor or trainer or the trainees, so that the interesting and interactive style of presentation of the material from the instructor is expected to make participants more focused on the training material.

### **The Effect of Online Training on Productivity**

Based on data analysis, it is known that online training has a positive but not significant effect on productivity. This means that the better the implementation of online training carried out by PT. Carsurin, Tbk will increase employee productivity but insignificantly. This finding is not in line with previous research by Nda and Frad (2013) and Indriastuti (2017) who found that training had a significant positive effect on work productivity. Online training indicators that have an influence on productivity include starting from the Y2.4 indicator with a loading factor value of 0.852, followed by Y2.3 with a loading factor value of 0.832, Y2.1. with a loading factor value of 0.599 and Y2.2 with a loading factor value of 0.883. Thus, the most dominant indicator is the determination to improve performance, while the lowest is the indicator of knowledge and skills. The implication of the findings of this study is that the knowledge and skill indicators obtained the lowest loading factor value, meaning that PT Carsurin, Tbk needs to ensure that each employee who takes part in the training has really understood the training material provided through pre-test and post-test. The trainees also ensure that the tests are done by themselves and do not depend on other colleagues to ask for answers, which is solely so that the grades obtained are high. Then the indicator of determination to improve achievement is the highest indicator, where there is motivation in oneself or a desire to do better so that there is an increase in achievement, but if balanced with the attitude and behavior that has been obtained from online training and carried out in daily life, the hope for this desire can also be obtained and achieved well.

### **The Effect of Team Building on Job Satisfaction**

Based on data analysis, it is known that team building has a significant positive effect on job satisfaction. This means that the better the implementation of team building carried out by PT. Carsurin, Tbk will increase employee job satisfaction. These findings support the research of Ahmad and Abdullah (2023) which explains that teamwork, employee diversity, and communication have a positive and significant effect on job satisfaction, but employee diversity has the lowest r-value among these three variables. Team building indicators that have an influence on job satisfaction include starting from the X2.1 indicator with a loading factor value of 0.907, followed by X2.4 with a loading factor value of 0.852, X2.2. with a loading factor value of 0.848 and X2.3 with a loading factor value of 0.762. Thus, the most dominant indicator is the understanding and practice of Core Values, while the lowest is the indicator of problem solving in the event of a conflict. The implication of the findings of this study is that the indicator of problem solving in the event of conflict is the lowest indicator, meaning that PT Carsurin, Tbk can monitor communication and coordination between one division and another. If something goes wrong between one individual and another either in one division or between divisions, leaders should be able to be a bridge for their members to behave and behave if the members are reluctant to solve problems. However, even though this indicator is the lowest, it can still be said to be good, because in reality at PT Carsurin, Tbk itself, the researcher sees that there is interpersonal communication between employees in the event of a conflict. Employees prioritize a personal approach to resolving their conflicts rather than reporting directly to superiors or leaders. Then the indicator of understanding and practice of Core Values is the highest indicator, being the highest point in this indicator, this has actually become a habit or culture for employees to understand and practice the core values of PT Carsurin, Tbk itself, especially in doing work, including Integrity and trust.

### **The Effect of Team Building on Productivity**

Based on data analysis, it is known that team building has a negative but not significant effect on productivity. This means that the better the implementation of team building carried out by PT. Carsurin, Tbk will actually reduce employee productivity, although not significantly. This contrasts with previous research conducted by Hadipranata and Sudardjo (1999) which found that team formation has a positive and significant effect on work ethic and contributes highly to work productivity of 87.5%. Baharom, et.al (2022) found that team formation has a positive and significant effect on employee work productivity. Then there is research by Anog, et.al (2023), team building activities can increase organizational efficiency and productivity because of its positive effect on relationships established in the work environment. If organizations simplify team building as a regular part of upskilling and employee development, productivity in the workplace will inevitably materialize. The explanation of the implications that cause the increase in team building at PT Carsurin Tbk decreases employee productivity, although it is not significant, because team building usually involves activities that require time outside of routine work At PT Carsurin, this activity can make employees have to leave their jobs temporarily to participate in training sessions and team-building activities. During this transition period, employee productivity in carrying out

daily tasks may experience a slight decrease due to the allocation of time for non-operational activities. While this effect is usually temporary, this decrease in productivity can become more pronounced if team building is done too often or for a long time. Team building indicators that have an influence on productivity include starting from the Y2.2 indicator with a loading factor value of 0.883, followed by Y2.4 with a loading factor value of 0.835, Y2.3 with a loading factor value of 0.832 and Y2.1 with a loading factor value of 0.599. Thus, the most dominant indicator is engagement with the leader, while the lowest is the indicator of attachment to work in the work environment. For the indicator between Y2.2 and Y2.4 itself, the difference is not too far. So that for the variables of the statement of involvement with the leadership, the ability to complete tasks on time, and the management of PT Carsurin, Tbk for human resources optimally at PT Carsurin, Tbk, especially in the Samarinda branch, it can be said that it is also going well. The results of this study show that team building activities have a negative influence, but not significantly on work productivity. These findings indicate that although there is a relationship between team building and productivity, the impact is not strong enough to make a significant difference in employee work productivity.

### **The Effect of Job Satisfaction on Productivity**

Based on data analysis, it is known that job satisfaction has a significant positive effect on productivity. This means that the higher the employee satisfaction, the higher the employee work productivity. This is in line with previous research conducted by research conducted by Tentama, et.al (2019) found that job satisfaction had a positive and significant effect on work productivity by 18.2%. Job satisfaction indicators that have an influence on productivity include starting from the Y1.3 indicator, which is with a loading factor value of 0.861, followed by Y1.2 with a loading factor value of 0.858, then Y1.4 with a loading factor value of 0.773, Y1.1 with a loading factor value of 0.746, and Y1.5, which is with a loading factor value of 0.593. So that the dominant indicator is Y1.3 with a variable statement regarding the career prospects of PT Carsurin, Tbk is clear and interesting, and the lowest is an indicator of harmonious social relations with superiors and other employees. Through loading factors between Y1.1 to Y1.4, the range is still not included in the good category.

## **V. CLOSING**

### **Conclusion and Recommendation**

#### **Conclusion**

1. Online training has a significant positive effect on job satisfaction. This means that the better the implementation of online training carried out by PT. Carsurin, Tbk will increase employee job satisfaction. In terms of the highest indicator, it is about presentation style, namely about the instructor or trainer being able to deliver training material in a dynamic, interesting, and easy-to-understand manner.
2. Online training has a positive but not significant effect on productivity. This means that the better the implementation of online training carried out by PT. Carsurin, Tbk will increase employee productivity but insignificantly. In terms of the highest indicator, namely the determination to improve achievements, where there is actually motivation in oneself or a desire to do better so that there is an increase in achievement, but if balanced with the attitude and behavior that has been obtained from online training and carried out in daily life, the hope is that this desire can also be obtained and achieved well.
3. Team building has a significant positive effect on job satisfaction. This means that the better the implementation of team building carried out by PT. Carsurin, Tbk will increase employee job satisfaction. In terms of the highest indicator, namely the understanding and practice of Core Values because it has become a habit or culture for employees to understand and practice the core values of PT Carsurin, Tbk itself, especially in doing work or behavior.
4. Team building has a negative but not significant effect on productivity. This means that the better the implementation of team building carried out by PT. Carsurin, Tbk has not been able to increase employee productivity even though it is not significant. In terms of the highest indicator, namely involvement with the leadership.
5. Job satisfaction has a significant positive effect on productivity. This means that the higher the employee satisfaction, the higher the employee work productivity. In terms of the highest indicator, namely regarding the career prospects of PT Carsurin, Tbk is clear and interesting.

#### **Recommendation**

1. For the company or management of PT Carsurin, Tbk:
  - a. Through online training held by PT Carsurin, Tbk has explained that it is good to have instructors or trainers in delivering training materials to the trainees, but another thing that needs to be considered is the training environment (training environment) Because of the conditions of holding training during working hours, it is not uncommon for employees who follow it to be divided in their concentration between doing work and participating in training. Even though the training is conducted online, it is important to still provide opportunities for

participants to interact, whether through group discussions, forums, or live Q&A sessions with instructors. This can at least help the participants remember more about the material provided, rather than just taking part in the training without any interaction process.

b. Although data analysis shows that online training has a positive but not significant effect on productivity. Therefore, efforts that can be made to increase the effectiveness of online training in increasing employee productivity include increasing online training materials that are tailored to real work needs at PT Carsurin, Tbk. Practical and applicable materials are expected to have a direct impact on increasing productivity. Then online training can also be connected to employee targets. Therefore, employees can see the relevance of daily work and use it as motivation to apply the knowledge gained.

c. Through the results of research that shows that team building has a significant positive effect on job satisfaction, the advice that can be used to maximize the benefits of team building on job satisfaction is that PT Carsurin, Tbk is advised to hold team building activities regularly and in a structured manner. With various types, such as worksop, outbound, and collaborative projects involving the entire team. Team building activities can be adjusted to the character and needs of the team. For example, for teams that work under high pressure, more relaxed activities can be held and focusing on stress management can be more beneficial.

d. Adjustments are needed so that team building activities can have a greater positive impact on productivity, such as the need for PT Carsurin, Tbk to review the types of teams building activities that have been carried out previously. There is a possibility that activities are not relevant or on target, so that they do not have a positive impact on productivity. Activities that are more targeted and in accordance with the needs of the team can be designed so that in the future they can be more effective. The time spent building on team building can also affect productivity. If team building during tight deadlines or when the volume of work is high, it may reduce productivity. So, it is better to schedule team building at a time that does not interfere with the workflow too much, so that it does not reduce the focus and productivity of the team.

e. The results of the study that show that job satisfaction has a significant positive effect on productivity emphasize the importance of paying attention to employee welfare aspects as the main strategy to increase organizational productivity. Suggestions such as efforts from PT Carsurin, Tbk to increase employee job satisfaction through various initiatives such as improving the work environment, providing supportive facilities, and developing a positive culture. Therefore, high job satisfaction will encourage employees to work more productively. Fair and competitive compensation, and rewards that match employee contributions are also suggestions to improve job satisfaction. Employees will contribute better to the productivity of PT Carsurin, Tbk. Developing or promoting a career can also increase job satisfaction. Employees will feel noticed if they have clear career prospects and tend to be more motivated and productive.

2. For the next researcher:

a. Researchers are further advised to consider other variables that may affect job satisfaction and productivity, such as leadership style, organizational culture, and employee engagement. By adding these variables, the results of the study can be comprehensive.

b. In order to get a deeper perspective, then researchers can also consider using qualitative research methods or mixed methods. By conducting in-depth interviews or case studies, it can explain more about the next research and provide deeper insights into online training and team building activities affect job satisfaction and productivity.

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