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Effect of job satisfaction, employee engagement, and work culture on employee performance during the Covid-19 pandemic

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HIGHLIGHTS

- An impact on PT XYZ employees
- There is a decrease in employee performance

ARTICLE INFO

ABSTRACT

XYZ is a manufacturing company producing paper and cardboard boxes for packaging. Based on field observations, the Covid-19 pandemic also impacts XYZ employees, namely changes in work habits. These changes make employees experience difficulties at work and make it difficult for them to meet production targets. Based on this, there are indications of a decrease in employee performance. Therefore, the researchers took several approaches to things that affect employee performance. This study aims to determine the effect of job satisfaction on employee performance, attachment to employee performance, and work culture on employee performance. The results obtained from these objectives are that the job satisfaction variable has a positive and significant effect on the employee performance variable, the employee engagement variable has a positive and significant effect on employee performance, and the work culture variable has a positive and significant influence on the employee performance variable.

1. Introduction

On March 2020, the Indonesian government announced the case of Covid-19 for the first time in Indonesia. Over time coupled with very high human mobility and across national borders, the Coronavirus spread rapidly and made this virus more dangerous. On 11 March 2020, this outbreak was declared a global pandemic by the World Health Organization (WHO) [1].

XYZ is a company engaged in paper manufacturing and cardboard box packaging. PT XYZ has 198 employees. Based on field observations, the Covid-19 pandemic also impacts XYZ employees, namely, changes in work habits. These changes make employees experience difficulties at work and make it difficult for them to meet production targets. Based on this, there are indications of a decrease in employee performance. Therefore, the researchers took several approaches to things that affect employee performance. Employee performance is the result of work in quality and quantity achieved by an employee in carrying out his duties

under the responsibilities given to him [2]. Employee performance is influenced by several factors, namely salary, work environment, organizational culture, leadership, work motivation (motivation), work discipline, job satisfaction, communication, and other factors [3].

Several performance approaches that can be taken are by looking for the positive relationship and influence of job satisfaction, employee engagement and work culture on employee performance. With the influence of these three variables, it is expected that the company can improve employee performance through efforts to increase job satisfaction, employee engagement and work culture. These three aspects are factors that affect employee performance [2]. Job satisfaction is the attitude of employees towards work, work situations, cooperation between leaders and fellow employees and the factors that influence job satisfaction include financial satisfaction factors, physical satisfaction factors, social satisfaction factors, and psychological satisfaction factors. Job satisfaction has a close relationship with the attitude of employees towards their own work, work

situations, cooperation between leaders and fellow employees [4]. Before achieving optimal performance, it is necessary to know how the employee's job satisfaction is with their competence. A person is not enough just to have a strong drive to achieve goals and achieve satisfaction, but they are also required to have competencies that are in accordance with their field of work. Competence can be used as the main criterion to determine a person's work, for example, for professional, managerial or senior manager functions [5]. Thus, the researcher assumes that job satisfaction is one of the factors that affect performance.

In addition, employee engagement is an employee's emotional commitment to the organization and its goals. This emotional commitment means employees genuinely care about their job and their company. They work for more than just salaries or promotions but on behalf of organizational goals [6]. Many factors cause human resources to have superior performance to encourage organizational success, one of which is employee engagement. Therefore, all components must be supported to improve employee performance, and the most important thing is to increase employee engagement.

In addition, things that need to be considered are work culture. Work culture is a philosophy based on a view of life as values that become traits, habits and also drivers cultivated in a group and reflected in attitudes into behaviours, ideals, opinions, views and actions that manifest as work or work [7]. Work culture is interpreted in various ways with the same intention. Work culture is a person's perspective in giving meaning to work. Thus, work culture is a person's perspective on the field he is engaged in and the moral principles he has, which fosters a strong belief based on values to realize the best performance. Human resources can be properly treated if supported by a good work culture. Well, where an individual can have a constructive or positive impact on the organization in which he is located.

Therefore, the researcher assumes that the company's work culture is one-factor affecting employee performance. The research was conducted using the Structural Equation Modeling (SEM) method. Structural Equation Modeling using SmartPLS 3 is a multivariate analysis technique developed to cover the limitations of previous analytical models widely used in statistical research. With this research, the company can continue developing employees' performance during the Covid-19 pandemic. The purpose of this study is to determine the effect of job satisfaction on employee performance, the effect of employee engagement on employee performance, and the effect of work culture on employee performance.

2. Material and method

In this research design, the researcher must determine the steps for problem-solving before determining the research method. Problem-solving in this study will be carried out using descriptive research methods using a quantitative approach, namely research that emphasizes the use of numbers starting from data collection, interpretation of the data, and the appearance of the results. Quantitative research is carried out when someone wants to prove something, which shows the existence of a variable, the relationship between variables, and proves a theory. Therefore,

researchers must plan the processes and data collection tools to be studied in detail. Returning the sample is generally done randomly, and data collection uses research instruments. Data analysis is quantitative to test the established hypothesis.

The method used for data processing in this study is the method of Structural Equation Modeling (SEM). The Structural Equation Modeling (SEM) method is a second-generation multivariate analysis technique that combines factor analysis and path analysis, enabling researchers to evaluate and estimate the relationship between multiple latent independent variables and multiple latent dependent variables.

This study uses the variables of job satisfaction, employee engagement, work culture and employee performance. The data processing results are then analyzed to determine whether job satisfaction, employee engagement and work culture influence employee performance at PT XYZ. These results can also be used as a guide for companies in improving employee performance which company conditions and policies will later readjust.

2.1. Problem formulation

Conceptualization of the model is the first step in PLS-SEM analysis. At this stage, the researcher must develop and measure the construct. There are several processes at this stage. (1) construct domain specification, (2) determine the items that represent the construct, (3) collect data for pretest, (4) construct purification, (5) new data collection, (6) reliability test, (7) validity test, and (8) determine the score of construct measurement. Furthermore, the direction of causality between constructs showing the hypothesized relationship must be clearly defined, and the dimensionality and indicators for forming the latent construct must be determined, whether reflexive or formative.

Fig. 1 is a conceptual model that exists to be an initial identification of the Structural Equation Modeling (SEM) model. The research model that has passed the conceptualization stage of the next model must determine the algorithm analysis method that will be used for model estimation.
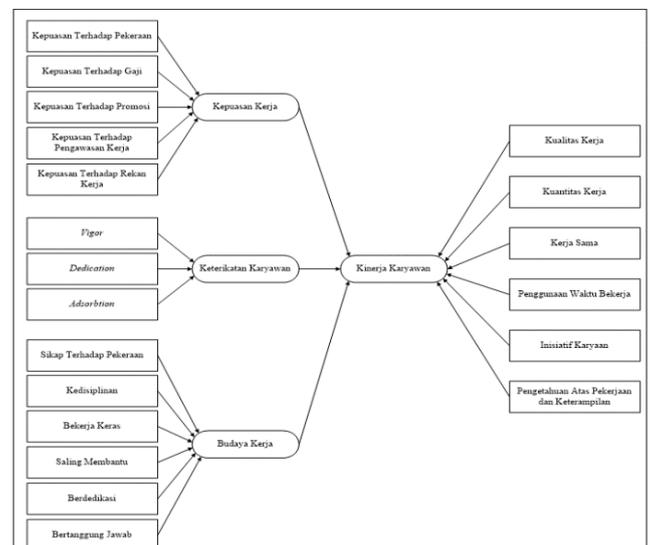

Fig. 1. Structural model

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In PLS-SEM using the SmartPLS 3 program, the algorithm analysis method provided is only the PLS algorithm with three choices of schemes, namely, Factorial, Centroid, and Path or Structural Weighting. The suggested PLS algorithm scheme is Path or Structural weighting.

2.2. Outer model

Evaluation of the measurement model (outer model) there is a validity test and a reliability test, the validity test consists of a convergent validity test and a discriminant validity test, then to measure the reliability of a construct with reflexive indicators it can be done in two ways, namely Cronbach's Alpha and Composite Reliability.

A convergent validity test for reflexive indicators can be seen from the loading factor value for each construct indicator. The rule of thumb that is usually used to assess convergent validity is that the loading factor value must be more than 0.7 for confirmatory research and the loading factor value between 0.6-0.7 for exploratory research is still acceptable, and the average variance extracted (AVE) value must be greater of 0.5. However, for research in the early stages of developing a measurement scale, the loading factor value of 0.5–0.6 is still considered sufficient.

2.3. Inner model

The inner or structural model describes the relationship between latent variables based on substantive theory. The structural model was evaluated using R-square for the dependent construct, the Stone-Geisser Q-square test for predictive relevance and the t-test and significance of the coefficients of structural path parameters, the R-Square (R^2).

In starting the structural model with PLS, we look at the R-Square (R^2) value for each endogenous latent variable as the predictive power of the structural model. Changes in the value of R^2 can be used to explain the effect of certain exogenous latent variables on endogenous latent variables, whether they have a substantive effect. R^2 values of 0.75, 0.50 and 0.25 can be concluded that the model is strong, moderate and weak. The results of PLS R^2 represent the total variance of the construct described by the model. Besides looking at the magnitude of R^2, the evaluation of the PLS model can be done with Q2 predictive relevance. This technique can represent the synthesis of cross-validation and fitting functions with predictions from observed variables and estimates of construct parameters. The value of Q2 > 0 indicates that the model has predictive relevance, while Q2 < 0 indicates that the model lacks predictive relevance. Furthermore, the evaluation of the model is done by looking at the bootstrapping procedure. The bootstrapping approach represents a nonparametric for the precision of PLS estimation. The bootstrapping procedure uses the entire original sample for resampling. Hypothesis Testing (Bootstrapping).

In assessing the significance of the influence between variables, it is necessary to perform a bootstrapping procedure. The bootstrap procedure uses the entire original sample for resampling. Reference [8] suggests several bootstrap samples of 5,000 provided that the number must be larger than the original sample. However, some literature suggests that some bootstrap samples of 200-1000 are

sufficient to correct the PLS standard error estimate [9]. In the bootstrap resampling method, the significance value used (two-tailed) t-value 1.65 (significance level = 10%), 1.96 (significance level = 5%) and 2.58 (significance level = 1%).

2.4. Implementation

Based on the results of the questionnaire, then data processing was carried out using the structural equation modelling (SEM) method using SmartPLS software. Model analysis using SEM was carried out because the model has latent variables that cannot be measured directly but through its indicators. The data processing results using the structural equation modelling (SEM) method show the relationship between variables and determine how influential the variables are. The value of the relationship between variables also shows how positively the variable affects the affected variable.

The final results or outputs and data processing will be analyzed for further development and the need for determining the right model in determining the relationship between each variable. These results can be used to evaluate XYZ and improve employee performance. The analytical technique used in this study is descriptive statistics which aims to provide an overview of the delivery and return of questionnaires, descriptions for respondents (gender, age, years of service, and last education) as well as a description of the research construct that shows the minimum, maximum, mean, and standard deviation value. Collecting data from this research is by observing or observing directly, conducting interviews, discussions and surveys, and distributing questionnaires conducted at XYZ. Based on the questionnaires that have been distributed, there are four variables: Job Satisfaction, Employee Engagement, Work Culture and Employee Performance.

3. Results and discussions

Questionnaires were distributed at XYZ using statement items applied and redeveloped from previous research. The statement items in this questionnaire direct respondents to assign a value to each statement based on employee suitability for the statements provided.

3.1. Questionnaire data

Respondent data is one of the important things in this study because, based on respondent data, we can find out the condition and condition of the respondent, which will be additional information to understand the results of this study, in this case, is the general description of the respondent or the characteristics of the respondent. Table 1 shows the characteristics of respondents who participated in this study.

Table 1.
Recapitulation of respondents by gender

No	Gender	Number	Percentage
1	Male	90	75%
2	Female	30	25%
	Amount	120	100%

Table 1 shows the recapitulation of 120 respondents at XYZ based on gender. There are 90 people, or 75% of respondents with the male gender, and 30 or 25% of respondents with the female gender. Recapitulation of 120 respondents based on age, there are as many as 32 people or 26.6% of respondents aged 20-30 years, 57 people or 47.5% of respondents aged 31-40 years, 24 people or 20% of respondents aged 41-50 years, and seven people or 5.8% of respondents aged more than or equal to 50 years. Based on the latest education, there are as many as 93 people or 77.5% of respondents, with the last high school education. Twenty-four people, or 20% of respondents, with the last education of bachelor's degree; three people or 2.5% of respondents with a last education of graduate, and there are no respondents with the last education Diploma, recapitulation of 120 respondents based on years of service, namely there are as many as five people or 15% of respondents with a working period of fewer than five years, 72 people or 60% of respondents with a working period of 5 to 10 years, 27 people or 22.5% of respondents with a working period 10 to 15 years, and three people or 2.5% of respondents with more than 15 years of service.

3.2. Outer model evaluation

In evaluating the measurement outer model, there is a validity and reliability test. There are two types of validity tests: the convergent validity test and the discriminant validity test. The reliability test is carried out using Composite Reliability [10]. This validity test measures the correlation value between constructs and latent variables. This test can be seen from the standardized value of the loading factor, which explains the correlation value between each indicator and the constructs measurement item. The results of loading factor are presented in Table 2. The rule of thumb is used to assess the convergent validity test where the loading factor value must be greater than 0.7, which means the indicator is valid. The average variance extracted (AVE) value must be greater than 0.5 to be accepted.

Table 2.
Loading factor value of job satisfaction

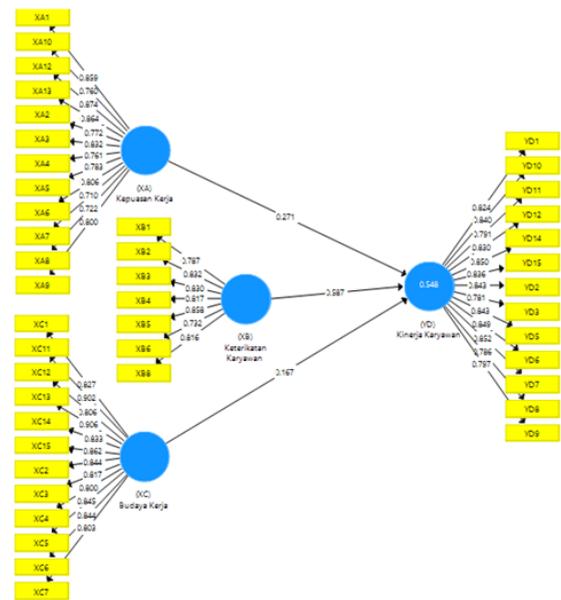| No	Item code	Loading factor
1	XA1	0.849
2	XA2	0.759
3	XA3	0.824
4	XA4	0.762
5	XA5	0.786
6	XA6	0.811
7	XA7	0.717
8	XA8	0.707
9	XA9	0.800
10	XA10	0.771
11	XA11	0.687
12	XA12	0.865
13	XA13	0.856
14	XA14	-0.273

Fig. 3. Modified result measurement model

Fig. 2 shows the outer model test seen from the outer loading value. The image of the initial measurement model (outer model) contains a manifest variable whose loading factor value is less than 0.70. Then the manifest variable must be removed from the model. The loading factor value of all manifest variables is more than 0.70 (> 0.70) except for the manifest variable with item codes XA11 and XA14. Therefore, the two item codes must be removed from the model because they do not meet the rule of thumb or the standardized value of the loading factor, which should be> 0.70. The following is the measurement model after eliminating the manifest variable whose loading factor value is less than 0.70.

Hypothesis testing is used to determine whether the hypothesis is accepted or rejected. Hypothesis testing is done by a bootstrapping method using t-statistics or t-test and using SmartPLS 3.0 software. The test is performed by analyzing the p-value. For example, in the bootstrap resampling method in this study, the significance value used in t-statistics is 1.96 (significance level = 5%), provided that the t-statistic value must be > 1.96. Fig. 4 is the results of the hypothesis test.
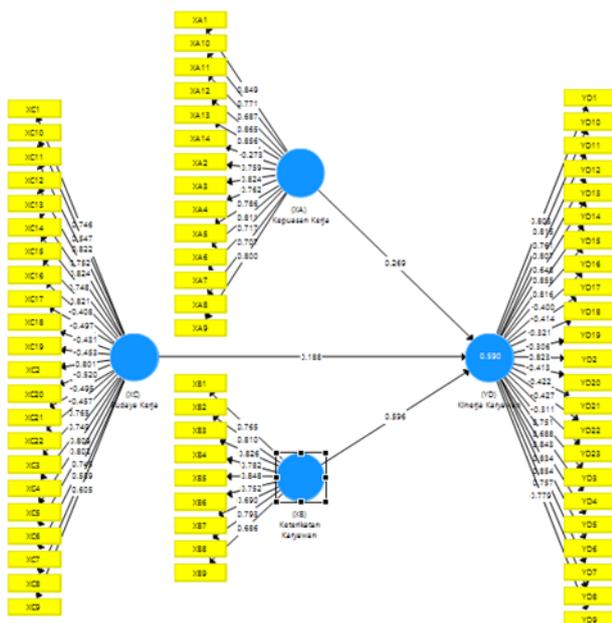

Fig. 2. Initial Measurement Model (Outer Model)

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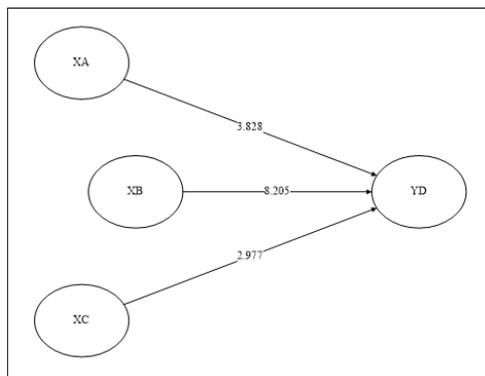
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Fig. 4. Hypothesis Test Results

The results of hypothesis test 1, XA (job satisfaction), have a positive and significant effect on YD (employee performance). It can also be seen in table 26 that there is a positive and significant effect between the variables XA (job satisfaction) on YD (employee performance) with the results. The resulting original sample value is 0.271, the t-statistic value is 3.828 with a two-tailed value of 1.96 at a significance level of 5%, and the resulting P-Value value is 0.000, where the significance test criteria are less than 0.05. From these results, it can be concluded that hypothesis 1 proves a positive and significant relationship between XA (job satisfaction) and YD (employee performance). Thus, the relationship between XA (job satisfaction) to YD (employee performance) is directly proportional, which means the higher the level of employee job satisfaction, the higher the level of employee performance and vice versa.

The research shows that the most significant loading factor value produced is 0.865. This value is found in the indicator of satisfaction with colleagues in the XA12 statement section with the statement "the work environment encourages my enthusiasm in completing work", with the highest loading factor value indicating that the XA12 statement is the most important. Effect on job satisfaction variables can be caused by several factors, including the work period.

Based on the results of the questionnaire data collection, there are 15% or 18 respondents with a working period of fewer than five years, 60% or 72 respondents who have worked 5-10 years, 22.5% or 27 respondents who have a working period of 10-15 years, and 2.5% or three respondents who have a working period of more than 15 years. It indicates that more than half the number of employees in XYZ has a long working period. Of course, it makes employees familiar with their work and recognises their work environment. Because of the long working period, the bond between employees is vital, making employees comfortable with their work environment. Of course, all of this impacts the Covid-19 pandemic, where employees must work more because they have to meet the company's targets with all kinds of habit changes that occur in the company. With good cooperation and a work environment, employees can still work well even during the Covid-19 pandemic. Likewise, with [9], which proves that the work environment has a positive and significant effect on the performance of the Semarang City Industry and Trade Office employees, of course, because of most employees of XYZ has worked long enough to make employees have a comfortable work environment so that the work environment can encourage employees to complete

their work. While the lowest loading factor value produced is 0.707, the value is found in the satisfaction indicator with promotions in the XA8 statement section with the statement "promotions carried out by the company motivate employees to be more developed and advanced" with the lowest loading factor value. It indicates that the XA8 statement has less effect on variable XA (job satisfaction) changes. In this case, it can be said that the company is still lacking in promotion for employees [10].

4. Conclusions

Job satisfaction variable has a positive and significant influence on employee performance variables, which means that the higher the level of job satisfaction, the higher the level of employee performance. employee performance, work culture variable has a positive and significant influence on employee performance variables, which means the higher the level of work culture, the higher the level of employee performance.

Declaration statement

Acknowledgement

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