THE EFFECT OF KNOWLEDGE MANAGEMENT AND WORK ENVIRONMENT ON EMPLOYEE PERFORMANCE AT PT PERKEBUNAN NUSANTARA IV UNIT KEBUN TINJOWAN

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Abstract
This study aims to determine and analyze the effect of Knowledge Management and Work Environment on Employee Performance at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit. This research employs a quantitative associative methodology. This study's sample consisted of PT personnel alone. At the Perkebunan Nusantara IV in Afdeling VI of the Tinjowan Plantation unit, there were 75 respondents. Validity and reliability tests, classical assumption tests, multiple linear regression analysis tests, hypothesis tests using t-tests and f-tests, and coefficient of determination tests are used for data analysis. Based on the findings of the study, it was determined that the knowledge management variable had a partial effect on employee performance, as indicated by the fact that Tstatistic (4,078) > Ttable (1,993), and that knowledge sharing was the indicator that became problematic for this variable. While the work environment variable has a partial effect on employee performance, as demonstrated by the value Tstatistic (7,844) > Ttable (1,993), the transportation indicator becomes an issue in this variable. Fstatistic 31,106 > Ftable (3,12), R = 0.681, and the Adjusted R Square value for this study is 0.449. Hence, the remaining 55.1% of the variance is not explained by employee performance and knowledge management and work environment influenced by issues outside the scope of this study.

Keywords: Employee Performance, Knowledge Management, Work Environment

1. INTRODUCTION
Palm oil is one of the industrial products that significantly contributes to Indonesia's economic growth. Indonesia is the largest palm oil producer in the world and employs 16 million people in the palm oil industry. Knowledge, social, economic, and environmental considerations are given priority in the development of the palm oil sector in Indonesia. This is consistent with the Indonesian government's commitment to implementing sustainable development, as outlined in the National Medium-Term Development Plan (hereinafter referred to as RPJMN) for 2020-2024. The implementation of the 2020-2024 RPJMN aspires to give access to equitable and inclusive development while safeguarding the environment in order to preserve a higher quality of life for future generations.

PT. Perkebunan Nusantara IV or PTPN IV is one of a state-owned company (hereinafter referred to as BUMN) with a vision to become a national agribusiness company that is superior and world-class competitive and continuously contributes to the progress of the nation, is one of the companies actively engaged in the palm oil industry sector. PT. Perkebunan Nusantara IV is engaged in agribusiness and agro-industry. PTPN IV manage two plantation commodity business sectors, namely the Palm Oil Commodity...
Business segment and the Tea Commodity Business segment, in the course of its operations.

The next aspect that needs to be considered in this case is the quality of the work of human resources owned by the company. Good quality work can be produced through the quality of human resources who have personal knowledge. As such, the role of knowledge/personal knowledge possessed by employees is very important, because with the knowledge possessed, employees are expected to produce good performance. Good performance can be proven if a person is able to carry out and complete his work well too. If the company has human resources capable of producing quality performance, it can support the company's success and also be able to continue to advance rapidly in competing in the industrial world along with the times (Pangabean et al., 2022).

As one of the State-Owned Enterprises which has a large number of employees, as well as a company that runs business under the B2B (Business-to-Business) model, which means selling products to other business companies, it is very important for PT. Perkebunan Nusantara IV to have high awareness and be responsive to the importance of taking strategic steps by continuing to improve the development of Human Resources to meet the demands of a growing industry, so that employees are expected to produce good performance for the company. Because in general, PT. Perkebunan Nusantara IV is also part of the development division of the HR Division placing Human Resources as strategic assets and strategic partners, who are ready to play an important role in optimizing business growth by producing quality performance so as to have a positive impact on the company.

Table 1 explains that in the tinjowan plantation unit there have been quite stable production performance results since 2017 and have increased in 2020, but in 2021 production has decreased significantly. This shows that there is a potential for a decrease in the individual performance of the employees which causes a decrease in the production of the tinjowan plantation unit. The data above is reinforced by the results of a pre-survey conducted at the tinjowan plantation unit, because it is known that the average performance of employees still shows results that are not good enough and needs to be improved. It can be concluded from the results of the pre-survey that only 50.8% of employees who are considered to provide good performance, while there are still 49.2%
of employees who are considered unable to provide good performance for the company, because some employees admit that they are still not complete various types of work on time, have not been able to maximize performance even though facilities have been provided by the company and also only some employees take the initiative to do work without waiting for orders from superiors.

Some of the factors that affect performance include knowledge management and the work environment. Along with developments in increasingly competitive global competition, knowledge has a very important role in it, so that in order to survive in knowledge-based competition, with a large number of employees, the company must be able to manage the knowledge that its employees already have. Knowledge possessed by employees is also a very valuable asset for every company because the knowledge possessed by employees of the company will help the company to move forward, therefore it is important for companies to manage the knowledge possessed by employees properly implementing knowledge management.

In this study, we conducted a pre-survey related to knowledge management variables to find out the results of implementing knowledge management at PT. Perkebunan Nusantara IV Tinjowan Plantation Unit. Based on the pre-survey, knowledge management at the tinjowan plantation unit on average shows results that are not good enough and needs to be improved again, because the number of employees who have represented the application of knowledge management by the company is only 45%, and the total percentage is smaller than with the percentage of employees who have not shown an attitude that is the result of knowledge management carried out by the company, which is equal to 55%. Some employees also confirm that they are still not able to create new knowledge at work, and only a few employees who can apply the knowledge they have in carrying out work activities. Meanwhile, knowledge management can be measured by the ability of employees to seek unlimited knowledge and information, create knowledge or new knowledge at work, share the knowledge they have and also use the knowledge that has been obtained in carrying out work.

According to the employees' responses to the pre-survey, the work environment at the Tinjowan Plantation Unit is inadequate and requires improvement. The percentage of employees who believe their employer has offered a good work environment is 49%, while the percentage of employees who believe their employer has not provided a decent work environment is 51%. This is due to the perceptions of some employees that the firm where they work has not provided appropriate work equipment, as well as the perceptions of other employees that the company has not provided transportation and means of transit to aid their work process. The physical work environment is deemed to be in good shape when it is determined that the company is able to provide buildings where workers can work effectively, suitable work equipment, and amenities to assist employees in accomplishing their work. While the condition of a good non-physical work environment is when people feel comfortable forming positive interactions with coworkers, superiors, and subordinates at work.

Based on the background mentioned above, this study aims to determine and analyze the influence of Knowledge Management and the Work Environment on Employee Performance at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit.
2. THEORETICAL BASIS

2.1. Knowledge Management

Broadly speaking, according to Andre et al. (2018:7), knowledge management is an integrated system consisting of people, process, and technology. The three pillars are interrelated and cannot be separated. One of the most important elements of the three pillars is "people" or humans. Humans are the central subject in knowledge management. Therefore, the success of knowledge management in an organization or company is highly dependent on humans. The role of humans in knowledge management cannot be separated from the framework and technology created.

According to Saputra et al. (2016) knowledge management is a sequence of activities businesses employ to identify, develop, explain, and disseminate knowledge to be reused, examined, and known within the organization. These activities typically connect to organizational objectives and attempt to achieve a certain outcome, such as information sharing, enhanced performance, a competitive advantage, or the creation of sustainable innovation.

According to Jerry Honeycut in Putranto et al. (2018) The scientific subject of knowledge management regards intellectual capital as an asset to be managed. It gives the right and accurate information to the right people at the right time, provides tools or media to analyze that information, and provides responsiveness to the results they obtain from analyzing that information. Knowledge management enables the transformation of information and experience into outcomes. On the basis of some of the preceding definitions, it is possible to conclude that knowledge management is a process of knowledge management activities that can be implemented in a company with the objective of increasing the company's knowledge so that it will have a positive impact on the company's value.

2.2. Work Environment

Some definitions of the work environment according to experts include, according to Ahyari in Widyaningrum (2019:56) explaining that the work environment is an environment in which these employees work in which there are elements of the conditions in which these employees work. Meanwhile, Nitisemito (2015:109) says that what is meant by the work environment is everything that is around the worker and that can affect him in carrying out the tasks assigned to him. For example, cleanliness, music and others. Because it can affect the work done, every company must make efforts in such a way as to have a positive influence on employees.

On the basis of some of the preceding definitions, it may be stated that the work environment is everything that is physically and non-physically present around the workers/employees. In this work environment, there are work facilities that support employees in performing given tasks in order to improve employee work in a firm. It is intended that this would have a positive impact on the ease with which employees carry out work procedures, hence maximizing work results.
2.3. Employee Performance

Febriyanti & Faslah (2013) state that in English, performance is referred to as job performance, actual performance, or level of performance. It is the degree to which employees are successful in accomplishing their work. Performance is not an individual trait, such as talent or ability, but rather the expression of talent or ability. Performance is the embodiment of skill through actual effort. According to Casio in Sinambela (2021) performance refers to achieving employee goals for the tasks assigned to them. Meanwhile, Stephen Robbins in Sinambela (2021) that performance is defined as the outcome of an appraisal of an individual's work in comparison to jointly established standards. On the basis of some of the preceding definitions, it can be inferred that performance is an activity including work and work results achieved by employees in the course of completing company-assigned tasks and occupations.

3. RESEARCH METHODS

This study employed an associative research with a quantitative approach as its methodology. According to Sugiyono (2017:8) quantitative research was defined as a research approach based on the positivist ideology, used to analyze certain populations or samples by collecting data using research tools, interpreting data statistically, and testing hypotheses. Meanwhile, associative quantitative research according to Sugiyono (2013:57) was research that asked the relationship between two or more variables. This research was conducted at PT. Perkebunan Nusantara IV, Afdeling VI Tinjowan Plantation Unit located in Afdeling VI Tinjowan, Ujung Padang District, Simalungun Regency. In this study, the population were all employees in Afdeling VI of the Tinjowan Plantation Unit totalling 75 people.

This research makes use of a saturated sample. According to S. Sugiyono (2017:85) a saturated sample was a sampling method in which all population members were employed as samples. The number of samples chosen was completely representative of the population, allowing for extremely precise generalizations. This study's sample consisted of 75 employees of Afdeling VI Tinjowan Plantation Unit.

The relationship between the independent and dependent variables can be illustrated in the following constellation figure:
4. RESULTS AND DISCUSSION

4.1. Research Results

Table 2. Results of Partial Significance Test (T Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>14.156</td>
<td>4.988</td>
<td>2.838</td>
<td>.000</td>
</tr>
<tr>
<td>Knowledge</td>
<td>.488</td>
<td>.282</td>
<td>093</td>
<td>.002</td>
</tr>
<tr>
<td>Management</td>
<td>Work Environment</td>
<td>.520</td>
<td>.066</td>
<td>.677</td>
</tr>
</tbody>
</table>

Source: Data Processing Results (2022)

1) The Knowledge Management variable (X1) has a partial effect on Employee Performance (Y), this can be seen from the significant value of Knowledge Management (X1), namely 0.02 < 0.05 and a T statistic value of 4.078 ≥ Ttable of 1.993.

2) The Work Environment Variable (X2) has a partial effect on Employee Performance (Y), this can be seen from the significant value of the Work Environment (X2), namely 0.02 < 0.05 and a T statistic value of 4.078 ≥ Ttable of 1.993.
Environment (X2), namely 0.00 < 0.05 and a T statistic value of 7.844 ≥ Ttable of 1.993.

3) From the results obtained and in accordance with the theory, it can be concluded that Knowledge Management (X1) and Work Environment (X2) variables have a significant effect on Employee Performance (Y).

Table 3. Simultaneous Significance Test Results (Test F)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>788.788</td>
<td>2</td>
<td>394.394</td>
<td>31.106</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>912.892</td>
<td>72</td>
<td>12.679</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1701.680</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data Processing Results (2022)

Based on Table 3, it is known that the F statistic value is 31.106 and the significance value is 0.00. It is known that the F statistic value is 31.106 > F table 3.12 and the Sig value is 0.00 <0.05, then Knowledge Management (X1) and Work Environment (X2) simultaneously or simultaneously have a significant effect on Employee Performance (Y).

Table 4. Coefficient of Determination Results (R² Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.681a</td>
<td>.464</td>
<td>.449</td>
<td>3.56077</td>
</tr>
</tbody>
</table>

Source: Data Processing Results (2022)

Based on the results of data processing shown in table 4 it is known that:

1) A correlation value (R) of 0.681 was obtained, which means that there is a relationship between Knowledge Management (X1) and Work Environment (X2) variables on Employee Performance (Y) of 68.1% so that the relationship between variables can be said to be close.

2) The adjusted R Square value of 0.449 or the value of the determinant coefficient shows that the Knowledge Management (X1) and Work Environment (X2) variables are 44.9% while the remaining 55.1% is influenced by other factors not discussed in this study.

4.2. Discussion

4.2.1. The Effect of Knowledge Management on Employee Performance at PT. Perkebunan Nusantara IV in Afdeling VI Tinjowan Plantation Unit

Knowledge Management variable (X1) has a partial effect on Employee Performance (Y), this can be seen from the significant value of Knowledge Management (X1), namely 0.02 < 0.05 and a T statistic value of 4.078 ≥ Ttable of 1.993.
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The results of this study are in line with the results of the study Ananda et al. (2021); Jadiraja (2016); Ferdian & Devita (2020); Kandou (2016) that Knowledge Management has an effect on Employee Performance. The application of knowledge management has been recognized as an important instrument for achieving the specific goals of an organization and even a country so as to maintain economic growth and competitive advantage (Oye et al., 2011). Employees are expected to be able to maximize their responsibilities after being equipped with knowledge management related to the implementation of their work. In addition, providing motivation is basically the right of employees and the obligation of the company to support the contribution of its employees in order to achieve predetermined goals (Rezsa, (2008) in (Arifin, 2016).

4.2.2. The Effect of the Work Environment on Employee Performance at PT. Perkebunan Nusantara IV in Afdeling VI Tinjowan Plantation Unit

The Work Environment Variable (X2) has a partial effect on Employee Performance (Y), this can be seen from the significant value of the Work Environment (X2), namely 0.00 < 0.05 and a Tstatistic value of 7.844 ≥ Ttable of 1.993.

In reality, the work environment indirectly influences employee performance. A suitable work atmosphere provides employees with a sense of safety and enables them to perform their best work. The work environment has a direct impact on employees’ ability to fulfill organizational obligations. If the employee enjoys his work environment, he will feel comfortable carrying out activities and completing duties at his place of employment. According to Mardiana (2011) that the work environment is the environment in which employees carry out their daily work. These results support previous research by Farisi & Fani (2019); Nabawi (2020); Siagian & Khair (2018); Yusnandar (2019) which proves that the work environment has a positive and significant influence on employee performance.

4.2.3. The Effect of Knowledge Management and Work Environment on Employee Performance at PT. Perkebunan Nusantara IV in Afdeling VI Tinjowan Plantation Unit

According to the findings of the study that was carried out, in the F Test, also known as the Simultaneous Significance Test, which can be found in table 4.50, the variables Knowledge Management (X1) and Work Environment (X2) have an Fstatistic of 31,106 and a Ftable value of 3.12, which indicates that Fstatistic > Ftable. The fact that the significance value of 0.00 indicates that it is also less than 0.5, which suggests that it is possible to draw the conclusion that the Knowledge Management (X1) and Work Environment (X2) variables both have a positive effect on Employee Performance simultaneously (Y). This demonstrates that the F-test hypothesis Ha3 should be accepted, but H03 should be disregarded. This indicates that there is a considerable influence on Employee Performance at PT. Perkebunan Nusantara IV Tinjowan Plantation Unit when Knowledge Management (X1) and the Work Environment (X2) are taken into consideration jointly or concurrently.

The calculation of the coefficient of determination in table 43 reveals that the relationship between the independent variables, namely Knowledge Management (X1) and Work Environment (X2) to the dependent variable, namely Employee Performance (Y), has a positive relationship and is categorized as very close. This conclusion is reached on the basis of the fact that this relationship has a positive correlation. According
to the value of the adjusted R Square, which is 0.449, or the value of the determinant coefficient, the variables of interest, Knowledge Management (X1) and Work Environment (X2), account for 44.9% of the total variance, while the remaining 55.1% is influenced by other factors that are not covered in this study.

Based on the results of research on the variable Employee Performance (Y), we found that Employee Performance at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit in general is quite good. However, in this variable we found weak indicators of cooperation in PT. Perkebunan Nusantara IV, Afdeling VI, Tinjowan Plantation Unit. This can be seen from the respondents' answers to the 10 (ten) statements which describe how good and how bad the performance of employees in the company is. All of these statements are the elaboration of 5 indicators, namely quality of work, quantity of work, responsibility, cooperation and initiative.

The findings of this study are consistent with the findings of the research that was carried out by Kurniawan (2018) who concluded that Knowledge Management (X1) and Work Environment (X2) simultaneously and positively affect Employee Performance.

5. CONCLUSION
5.1. Conclusion

On the basis of the research findings and discussion of the impact of Knowledge Management and the Work Environment on Employee Performance at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit, the following conclusions can be drawn:

1) Variable Knowledge Management partially has a positive and significant effect on employee performance at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit. Based on these results, it means that Ha1 is accepted and Ha0 is rejected. The most influential indicator in this variable is the use of knowledge (knowledge using), this can be seen from the results of research which show that the majority of employees agree that they always apply the knowledge gained in carrying out work activities, because some jobs can indeed be helped by the knowledge possessed by employees to make it easier to carry out work activities. This shows that the better the implementation of Knowledge Management in the company, the better the employee performance will be.

2) The work environment at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit has a favorable and significant influence on employee performance. This demonstrates that Ha2 is acceptable while H02 is unacceptable. The most influential indicator in this variable is the relationship with co-workers, as shown by the study's findings that the majority of employees strongly agreed that employees could establish good communication with their co-workers, as there were no communication problems between employees. Therefore, employees easily establish good communication with fellow co-workers. This indicates that the greater the quality of the company's work environment, the greater the employee performance.

3) Employee Performance at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit is significantly influenced by both Knowledge Management and Work Environment Variables. On the basis of these outcomes, Ha3 is approved
whereas H03 is refused. The most relevant indication in this variable is the quantity of work, as shown by the research findings that the majority of employees feel that employees can accomplish various types of work on time, because employees constantly strive to complete their assigned work on time. According to the results of the coefficient of determination, the relationship between the independent variables Knowledge Management (X1) and Work Environment (X2) and the dependent variable Employee Performance (Y) is positive and classed as extremely near. This indicates that Knowledge Management and Work Environment can boost employee performance.

5.2. Suggestion

Based on the results of the research and discussion above, the researchers suggest PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit to improve employee performance, by improving several aspects as follows:

1) Based on research related to the Knowledge Management variable, it is known that the level of knowledge sharing is still low at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit. Based on this, it is suggested to PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit to form a Knowledge Sharing Community which requires all employees to join it. This community can be a place for employees to understand how important the application of Knowledge Management is, so that employees can realize the benefits of knowledge sharing activities among members to obtain new ideas that can improve employee performance.

2) Based on research on the Work Environment variable, it is known that the means of transportation at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit still has not met the needs to support employee performance. As such, we suggest PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit to take a serious stance in dealing with problems related to transportation facilities by making a special report letter containing a description of the problems in the afdeling caused by a lack of transportation facilities, then the letter is addressed to the head office to request assistance regarding the procurement of transportation facilities fruit in Afdeling VI of the Tinjowan Plantation Unit so that it can assist employees in carrying out their work activities more effectively and efficiently.

3) Furthermore, based on research on employee performance variables, it is known that cooperation at PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit needs to be improved. Thus, we suggest PT. Perkebunan Nusantara IV Afdeling VI Tinjowan Plantation Unit to routinely hold joint activities outside of work involving all employees both vertically and horizontally which can be scheduled as needed. Examples include exercising together, eating together, and so on. This is recommended because in carrying out the work the employees get quite heavy work pressure which can cause each employee to quickly feel bored or stressed at work.
REFERENCES


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