Work Environment and Empowerment on Craftsmen Productivity at The Furniture Industry Center in Lumajang

Hartono

Department of Management, Institut Teknologi dan Bisnis Widya Gama Lumajang

hartono58.wiga@gmail.com

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ABSTRACT

The human aspect holds an important role in sustainability and development of the company because basically every company activity is never separated from the human element. Production, marketing and technology activities cannot run without being carried out by humans. Both large and small companies, in the human resource approach means each organization or company must be able to create a sense of secure and satisfaction so that the human resources in work environment become competitive. The objective of this study is to determine the effect of work environment and empowerment on craftsmen productivity at Furniture Industry Center in Karangbendo village, Lumajang. The independent variables are work environment and empowerment. The dependent variable is productivity. The respondent of the study are craftsmen at Furniture Industry Center in Karangbendo village, Lumajang with a sample of 30. By using multiple linear regression analysis technique, the results obtained that the work environment has a significant effect on productivity, the empowerment has no significant effect on productivity while simultaneously the work environment and empowerment have significant effect on productivity. The 51.3% of productivity can be explained by work environment and empowerment variables and the remaining 48.7% was affected by other variables that not examined in this study.

Keywords: Work Environment, Empowerment, Productivity.

INTRODUCTION

The industrial sector is used as a measure of the progress of an area. The increasing consumer needs require the producers to compete for their market. It requires the producers to make every effort to increase productivity, efficiency, services and sustainable innovation to anticipate the shorter product life cycle. The producers also have to know what is needed by consumers as consideration production and stock. To support this, competent human resources are needed, as well as support for their performance and productivity.

Building a high performance team apart from having role and responsibility awareness of each member, it is also very important that the full ability and commitment of all members are
needed. The commitment of member to high performance is also influenced, one of which is the work environment around them and their empowerment efforts. According to Alex S. Niti Semito in Danang Sunyoto (2015:38), the work environment is everything that is around the workers and can affect them in carrying out their assigned jobs, for example, cleanliness, music, lighting and others. Empowerment is a means that can be done as a stimulus to increase work productivity. The workers will unleash their potential through empowerment so that it will affect their productivity. Empowering is a duty for company owners to maintain the continuity of the company by increasing their productivity. Empowerment can be in the form of giving more responsibility and authority so that a sense of responsibility and work spirit will be reflected, which can create a desire to work and give the best for the job. According Goetsch & Davis (2006, 230), the empowerment does not only involve employees but involving them by giving a real voice. Involving the employee in decision making regarding their work is a basic principle of good management. With total quality management, this principle takes precedence even. The employees are not involved in decision making only, but also in creative thought process which initiates decision making.

The research on environment and empowerment have been done previously by Merlin Kurniati and Prastyo Widyo Iswara (2013), in their study “The Effect of Work Stress, Work Environment and Organizational Culture on Lecturer Performance”, is giving the results that work environment, work stress and organizational culture have significant effect on lecturer performance simultaneously. Suryani, D. & Wulandari (2009) in their research “The Correlation between Workload, Work Stress and Conflict Level with Nurse Work Fatigue in Islamic Hospital Yogyakarta PDHI Kota Yogyakarta”. The results showed that there was a significant correlation between workload, work stress and conflict level with work fatigue. Diana Khairani Sofyan (2013) (Sofyan, 2013), in their research “The Effect of Work Environment on BAPPEDA Employee Performance. The results showed that there was a significant effect between the work environment on BAPPEDA employee performance in District X, so that the work productivity is affected by the work environment.

The study on work environment and empowerment is carried out on furniture craftsmen at the furniture industry center in Karangbendo village, Lumajang. The competition in competitive business world encourages companies to further enhance their competitiveness. The success of craft industry in the future depends on how good the human resources management. The human aspect holds an important role in sustainability and development of the company because basically every company activity is never separated from the human element. Production, marketing and technology activities cannot run without being carried out by humans. Both large and small companies, in the human resource approach means each organization or company must be able to create a sense of secure and satisfaction so that the human resources in work environment become competitive.

No exception at the furniture industry center in Karangbendo village, Lumajang. The demands condition on the furniture craftsmen demand an adjustment process, while on the other hand employees also have limitations, such as work environment atmosphere and efforts to empower them. Therefore, efforts are needed to improve the work environment and empower the craftsmen to be able to increase their productivity. The continuous research on work environment and empowerment with its effect on productivity require problems that will be answered through hypothesis test as follows:

a. Is there a significant work environment effect on craftsmen productivity at the furniture industry center in Karanbendo village, Lumajang?

b. Is there a significant empowerment effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang?

c. Is there a simultaneous significant work environment and empowerment effect on craftsmen productivity at the furniture industry center in Karanbendo village, Lumajang?

Based on the formulation of the problem, the following hypothesis can be formulated:

H1: There is significant work environment effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.
H2 : There is significant empowerment effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.

H3 : There is simultaneous significant work environment and empowerment effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.

METHODS

Research Design
The research is a survey research, it does not make changes or does not have a special treatments on researched variables (non-experimental).
The purpose of this study is explanatory research where explanatory research is a type of research that explains the causal relation between one variable and another through hypothesis. Based on its character, this research is explorative because it needs further examination.

Research Object
The research was conducted on craftsmen at the furniture industry center in Karangbendo village, Lumajang. The reason for choosing this object is: (1) the furniture industry is currently facing a quite sharp competition level, (2) the number of furniture business is increasing and (3) the craftsmen productivity is one of the determinant success of furniture industry center in Lumajang.

Sources and Type of Data
The data source used in this study is internal data and external data. The internal data is data of furniture crafts development in Lumajang, while the external data is data review on previous research obtained from scientific journals and furniture crafts development in Lumajang.
The type of data used in this study is primary data obtained directly from research respondents, which was craftsmen at the furniture industry center in Karangbendo village, Lumajang by giving questionnaire.

Data measurement is done by giving a score to each answer from question item of the questionnaire. The scoring in this study based on the Likert scale. According to Sugiyono (2008:93) the Likert scale form as follows:

a. Strongly agree/ always/ very positive scored 5
b. Agree/ often/ positive scored 4
c. Uncertain/ sometimes. Neutral scored 3
d. Disagree/ almost never/ negative scored 2
e. Strongly disagree/ never 1

Population and Sampling Technique
The population in this study were craftsmen at the furniture industry center in Karangbendo village, Lumajang. The sampling technique used in this study is simple random sampling where the principle of sample selection is each element in the population has the same opportunity to be selected.
The sample measure determining method used is develop by Roscoe in his book “Research Methods for Business (1982:253) as quoted in (Sugiyono, 2015:164), a decent sample measure in the research are between 30 and 500. Therefore, the number of sample in this study is 30 respondents.

Research Variables
The variable used in this study consist of independent variable and dependent variable. The independent variables are work environment and empowerment, while the dependent variable is productivity.
Research Instruments

Table 1
Research Instruments and Measurement Scale

<table>
<thead>
<tr>
<th>No</th>
<th>Variables</th>
<th>Indicators</th>
<th>Measurement Scale</th>
</tr>
</thead>
</table>
| 1. | Work Environment   | 1. Noise can affect the completion of work.  
2. The job security factor is very important for employees.  
3. A conducive work environment is very helpful for employees.  
4. Current workspace ventilation and lighting is adequate. | Ordinal           |
| 2. | Empowerment        | 1. The work is done in accordance with the employees wishes.  
2. The current job is very important.  
3. Want to provide the best for the company.  
4. Have confidence in their ability.  
5. Confidence in achieving targeted job.  
6. The job done is the right choice.  
7. The accuracy of work placements with colleagues.  
8. Have the ability to do any job.  
9. Ability to manage relationships with colleagues in the work environment. | Ordinal           |
| 3. | Productivity       | 1. I always carry out my jobs and have professional attitude at work.  
2. I always try to improve the results achieved according to the specified targets.  
3. I am always passionate at work and have the principle that today is better than yesterday.  
4. I always develop myself to improve my employability.  
5. I always try to improve my quality better than in the past.  
6. I always compare the results achieved with the total resources used. | Ordinal           |


Data Analysis Technique

The data analysis technique used in this study is multiple linear regression analysis. Previously, the research instrument will be tested because the research instrument used is questionnaire which must be tested its validity and reliability. To be able to continue in multiple regression analysis, it must meet the classical assumptions, namely data are normally distributed, free of multicollinearity and heteroscedasticity. Furthermore, the hypothesis will be tested, as follows:
The t test (for partial test) is used to determine the effect of independent variables on dependent variables partially which will be tested significantly. The criteria testing as follows:
If the t count < -t table or t count > t table, H1 is accepted.
If the \(-t\) table \(\leq t\) count \(\leq t\) table, \(H_1\) is rejected. The F test (for simultaneous test) is used to determine the effect of independent variables on dependent variables simultaneously which will be tested significantly. The criteria testing as follows:
If the F count \(\geq F\) table, \(H_2\) is accepted.
If the F count \(< F\) table, \(H_2\) is rejected.

RESULTS AND DISCUSSION

Data Analysis Results
The respondents in this study were craftsmen at the furniture industry center in Karangbendo village, Lumajang. The number of respondents who were used as samples of this study were 30 people. The following are the data that will be presented related to the respondent general description:

### Table 2
**Description of Respondents According to Gender**

<table>
<thead>
<tr>
<th>No.</th>
<th>Gender</th>
<th>Quantity</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Male</td>
<td>24</td>
<td>80%</td>
</tr>
<tr>
<td>2.</td>
<td>Female</td>
<td>6</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Data source: Results of the Questionnaire Research, 2020.

### Table 3
**Description of Respondents According to Education**

<table>
<thead>
<tr>
<th>No.</th>
<th>Education</th>
<th>Quantity</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>High School</td>
<td>20</td>
<td>66.67%</td>
</tr>
<tr>
<td>2.</td>
<td>Bachelor</td>
<td>10</td>
<td>33.33%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Data source: Results of the Questionnaire Research, 2020.

### Table 4
**Description of Respondents According to Age**

<table>
<thead>
<tr>
<th>No.</th>
<th>Age</th>
<th>Quantity</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>21 – 30</td>
<td>20</td>
<td>66.67%</td>
</tr>
<tr>
<td>2.</td>
<td>31 – 40</td>
<td>6</td>
<td>20.00%</td>
</tr>
<tr>
<td>3.</td>
<td>41 – 50</td>
<td>4</td>
<td>13.33%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Data source: Results of the Questionnaire Research, 2020.
Based on the classical assumption results, it was obtained that the data are normally distributed, free of multicollinearity and heteroscedasticity. Furthermore, the results of multiple linear regression equation are obtained as follows:

\[ Y = 22.363 + 0.096 X_1 + 0.046 X_2 \]

The hypothesis testing partially by using the t test, first the \( t_{\text{table}} \) value is determined where the \( t_{\text{table}} \) value with \( \alpha = 10\% \), df (n-2) it is obtained the \( t_{\text{table}} \) (\( \alpha/2 \); 30-2) = (0.05 ; 28) = ± 2.048, the following results are obtained:

1) **Hypothesis Test 1**

The \( t \text{ count} \) value is obtained of 2.467 with significant level of 0.004 which means the \( t_{\text{count}} \) (2.467) > \( t_{\text{table}} \) (2.048) and sig (0.004) > \( \alpha \) (0.05), hypothesis is accepted and concluded that there is significant work environment effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.

2) **Hypothesis Test 2**

The \( t \text{ count} \) value is obtained of 0.308 with significant level of 0.761 which means the \( t_{\text{count}} \) (0.308) lies between ± the \( t_{\text{table}} \) (2.048) and sig (0.761) > \( \alpha \) (0.05), hypothesis is rejected and concluded that there is no significant empowerment effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.

3) **Hypothesis Test 3**

First, the \( F_{\text{table}} \) value is determined, where the \( F_{\text{table}} \) value with \( (\alpha);(\text{df1});(\text{df2}) = (\alpha \ 0.05);(\text{df1}=6);(\text{df2}=30-6-1=23) \) the \( F_{\text{table}} \) is obtained = 2.53

From the test results, the \( F_{\text{table}} \) is obtained of 3.117 with significant level of 0.008 which means the \( F_{\text{count}} \) (3.177) > \( F_{\text{table}} \) (2.53) and sig (0.008) < \( \alpha \) (0.05) hypothesis is accepted and concluded there is significant work environment and empowerment effect simultaneously on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.

The coefficient of determination (R Square) is obtained of 0.513, it means that 51.3% of craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang can be explained by work environment and empowerment variables, while the remaining 48.7% of productivity was affected by other variables that not examined in this study.

**Discussion**

**The Effect of Work Environment on Productivity**

This discussion is related to the test results on the first hypothesis which states that there is significant work environment effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang. The result shows that it is proven that the work environment has a significant effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang. Based on the items description stated in the questionnaire, the work environment variable consist of (1) noise can affect the completion of work, (2) the job security factor is very important for me, (3) a conducive work environment is very helpful for me and (4) current workspace ventilation and lighting is adequate. These four statements form work environment variable which ultimately make work environment variable has a significant effect on productivity.

It is interesting to discuss that in fact the work environment affects the furniture craftsmen productivity. The empowerment does not only involve employees but involving them by giving a real voice. Involving the employee in decision making regarding their work is a basic principle of good management. With total quality management, this principle takes precedence even. The employees are not involved in decision making only, but also in creative thought process which initiates decision making. At the furniture industry center in Karangbendo village, it seems that all decisions, both in terms of the craft model and the produced quantity are entirely the business owner decision without involving employees. So that the empowerment in this business does not go well, because the craftsmen are only do what the business owner has planned.
The Effect of Work Environment and Empowerment Simultaneously on Productivity

This discussion is related to the test results on the third hypothesis which states that there is simultaneous significant work environment and empowerment effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang. The result shows that it is proven that the work environment and empowerment have simultaneous significant effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang. Why simultaneously the work environment and empowerment have significant effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang, while the work environment variable has an effect partially? This can be explained that in the principle, humans return to their basic motivational needs, that after all they work to meet basic needs and sense of comfort in their work environment and the need to feel involved in decision making about production will greatly support the craftsmen productivity. This together can make the craftsmen productivity better.

CONCLUSION

The study aims to determine the significant work environment and empowerment effect, both partially and simultaneously on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.

a. It is proven that work environment has a significant effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.

b. It is proven that empowerment has a significant effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.

c. It is proven that work environment and empowerment simultaneously have significant effect on craftsmen productivity at the furniture industry center in Karangbendo village, Lumajang.

REFERENCES


