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The Influence of the Quality of Human Resource Management (HRM) on the Performance Improvement of Contracting Companies in the Implementation of Construction Projects in Timor Leste

Natalicio Pinto
Master's Student, Department of Civil Engineering,
Parahyangan Catholic University, Indonesia
Dr. Anton Soekiman
Senior Lecturer, Department of Civil Engineering,
Parahyangan Catholic University, Indonesia

Abstract:
In generally, the quality of human resources in Timor Leste still poor, weak in human resources it's always causes contractor companies in Timor Leste when they have difficult organizing and managing construction projects. The purpose of this study is to determine the aspects of the quality of human resources simultaneously and partially affect the performance improvement of contractor companies. The method of this journal is applying the descriptive method by using a questionnaire distribution technique from 73 respondents to a contractor company in Timor Leste. The findings of this study indicate that simultaneously had ability to work, skilled in working, discipline in working, and technical expertise which have a positive and significant impact on improving the performance of contractor companies in Timor Leste. Meanwhile, knowledge in working partially has no effect on the performance of contractor companies in TimorLeste.

Keywords: *Ability to work, knowledge in working, discipline in working, technical expertise*

1. Background

Contracting companies are usually synonymous which provide construction projects for the service users. According to the implementation of construction projects, contractor companies always involve in many parties from the various experts in their respective fields to complete the construction projects. The role of construction projects is very important to help and manage human resources for construction. Human Resource management is the major part of a contracting company. The way of management, may help contractor companies organize and manage human resources in particularly the mission of achieving its goals. HRM is the part of the five main pillars of management, namely HRM, material management, financial management, machine management and time management (Prasanna Kumar et al., 2018). One of the main keys to succeed construction projects is the good quality of human resources, (Supriyadi et al., 2020). Good quality human resources are one of the important factors that must be owned by contractor companies to pursue and improve the performance that has good quality contractor companies, while maintaining their existence so that they can successfully complete their mission deeper (AnandaLubis et al., 2019). The contractor company must prioritize the quality of human resources which could determine the company's successfulness in achieving quality performance (Dewi et al., 2016). The quality of human resources affects the performance of the contractor company because it has a relationship with the success of the construction project. The Good quality human resources can help speed up the company and improve the performance of contractor companies (AnandaLubis, et al., 2019 and Supriyadi et al., 2020). The better quality of human resources, the more edition to the company's performance would help contractor companies' complete construction projects.

The human resources in Timor Leste still weak. The low quality of human resources has a major impact on increasing the performance of contractor companies, in several construction projects which experiencing delays. The causes of delays in construction projects are weak in human resources, shortage of experts in the field of civil engineering, lack of skill in working and knowledge to manage or regulate human resources owned by contracting companies in every construction project for implementation in the field, where constantly lack of understanding of work methods, misunderstanding to design changes about material quality. The factors that owned by HR could help the contractor company to achieve its goals. These factors such as skill in working, discipline in working and technical expertise. The human resource factors reached its expectation to demonstrate the progress of the contractor company (Esthi, 2020); (Dewi, et al., 2016) and (Sitompul, 2017).

The ability in working which affects the performance in improvement of the contractor company and this factor is an ability that an employee needs to work in a contractor company independently. An employee who has the skills in working can help contracting companies to maximize their performance and the company can complete the work to achieve the specified goals (Nuariningsih&Widiastini, 2020). The knowledge in working is very influential on the performance of a contractor company because ability possessed by an individual who is more intelligent. Having skill in working will guide us to understand the concepts and the methods in field (Ratnasari, et al., 2021). Discipline in working would affects the improvement of the performance of the contractor company which perform the behaviors as an individual when getting the responsibility in a contractor company. The implementation of construction projects, discipline is very important because it's coherently with company rules. The main rule in a contracting company is how an employee works effectively, efficiently and follows company rules where can help to complete the responsibility in accordance with the objectives. (Sitompul, 2017), (Ratnasari et al., 2021) and (Esthi, 2020). Technical expertise is an important thing in a contracting company. This factor has a relationship with the success of a construction project. Technical expertise factor, may help contractor companies to manage their human resources as well as the company itself (Masram, et al, 2015). The performance of a contractor company is the result of the quality in working and the amount of working completed by contractor workers which carrying out their obligations in accordance with the obligations assigned to them (Vebrianti, 2016). The Performance is a description of the level of success of implementing an activity or policy in realizing the goals, objectives, mission, vision, organization contained in the strategic planning (Ruci&Kristiana, 2019). The Strategies to improve the Human Resource management in contracting companies are very necessary in order to help the companies to be more competitive and able to tackle the challenges ahead. Increasing the HRM management in contracting companies, it would realized through recruitment, placement, recitation/compensation and career development based on competence (Supriyadi, et all., 2020). The contractor companies need HR management as well as to provide training and develop quality of employees, manage HR, finance, marketing and production so they can help to improve the performance of contractor companies in the long-term plan (Abidali& Ali, 2018). The main objective of this study is to determine whether the quality of HRM has a simultaneous or partial effect onimproving the performance of contractor companies in the implementation of construction projects in TimorLeste.

2. Literature Review

The Human resource management (HRM) is an important space of the company, HRM should be seen as an extension of the customary view to adequately supervise individuals which requires the information about human behavior and the certainty in monitoring (Edy, 2017). Human resource management such the ways in which the people employed, managed, and developed in an organization. Human resource management also delivered through a human resource system that operates the framework which provided by the human resource management architecture. Human resource management (HRM) has its own job to manage the people well to satisfied the responsibility with their workers (Armstrong & Taylor, 2020). The main objective of human resource management is to ensure the company's ability to succeed through its human resources. Therefore, the human resource management strategy aims to support the program and increase the effectiveness of the organization by developing policies in the areas of skill in management, talent in management, and producing the great workplace to work (Armstrong & Taylor, 2020).

2.1. Factors Affecting Company Performance

(Dewi, et al., 2016) this research entitled analysis of aspects of human resources on performance construction projects in Bandung Regency. These findings indicate that competence, motivation, loyalty and discipline in working have a positive effect on employee performance. (Zainullah, et al., 2012) his research had the influence of wages, abilities and work experience on the performance of workers by implementing formwork on the concrete work. The findings of this study indicate that wages, ability in work and experience in work have a significant influence on the performance of the implementation of formwork work. (Falah&Parestya, 2017) this research entitled the influence of management knowledge on employee performance and company performance (study on employees of Pt. Semen Indonesia ParseroTbk). The findings show that the skill in working has the variable effects on employee performance and company performance. (Alias &Serang, 2018) his research on the effect of knowledge, work attitudes and work experience on employee performance. Which countable from the test results indicate the knowledge, the attitudes and the work experience were affect employee performance. (Ratnasari et al., 2021) in his research found the results of the study showed the training had a positive and significant effect on the performance of PT. International EMI, the work in discipline has a positive and the significant effect on the performance of employees of PT. EMI International, the role of human resources, training and work discipline simultaneously have a positive and significant effect on the performance of employees of PT. International EMI. (Sekarsari, 2020) The performance on construction projects is influenced by the aspects of human resources, namely competency aspects, motivational aspects, loyalty aspects and the work discipline aspects. The aspects of human resources are affecting the performance of construction project for workers and the most influencing one the aspects of working in the discipline, the loyalty aspects, the competency aspects and motivational aspects.

3. Research Hypothesis

The research hypothesis is a respondent who has not been correct or has not tested the truth of the formulation of the problem in the field study. The formulation of this problem, it will be the form of the question so that it can be tested for truth. The hypotheses of this study as follows:

- H01 = It is suspected the work ability, the knowledge of working, the discipline in working, the technical expertise and honesty simultaneously affect the performance on improvement of contractor companies in the

implementation of construction projects in TimorLeste.
- HA1 = the Work ability, the knowledge in working, the discipline in working, the technical expertise and honesty partially affect the performance on the improvement of contractor companies in the implementation of construction projects in TimorLeste.

The terms of acceptance and rejection are as follows:
- If F count<F table, and the significance value > 0.05 then H01is rejected
- F count>F table, and the significance value < 0.05 then H02 is accepted

The terms of acceptance and rejection are as follows:
- If t count < t table and significance level > 0,05% then HA1 is rejected
- If the t count > t table and the significance level is < 0,05%, then HA2 is accepted

4. Research Methodology

4.1. Population and Research Sample

In this study, the sample that will be taken by the researcher as the respondent is the contractor companies in Timor Leste. The sample which used in this study is the total population who work for contractor companies on the implementation of construction projects in Timor Leste as many as 73 people.

4.2. Measurement Scale

This study, the researchers used SPSS software to calculate the variables studied which could get accurate test results. The researchers also apply the Likert Scale to measure the attitudes, knowledge, and opinions of a particular person or the group in the social event. By applying the Likert Scale approach, the measured variables would translate into indicator variables. After that, these indicators applied as the starting point to regulate the components of the instrument in the form of the statements or the questions that can be responded to by respondents (Sugiyono, 2014).

Nu.	Question Weight
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

Table 1: Likert Scale Weight
Source: Ridwan, (2015)

4.3. Research Model

This research model is the research perspectives which applying for this study, the purpose to describe this research realistically and learn about its phenomena were happening and the methods applied for this research is to interpret the findings.
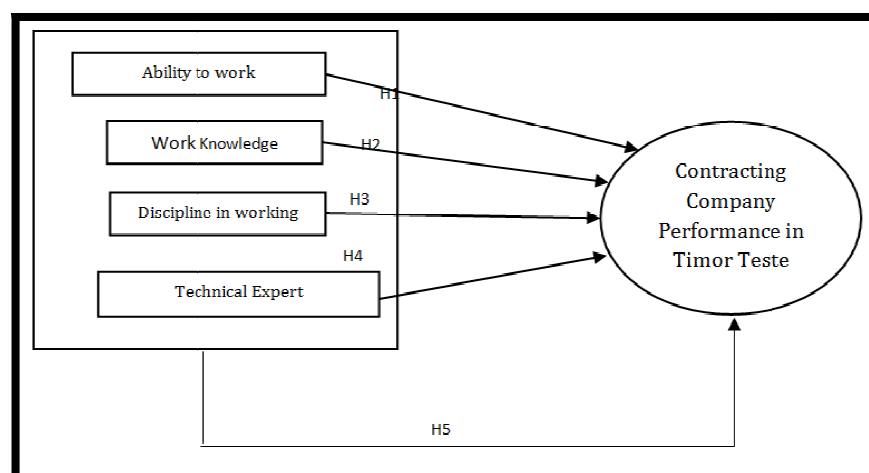

Figure 1: Resource Model

4.4. Data Analysis Techniques

The data analysis technique in this research is the Multiple Linear Regression. the Multiple linear analyses are applied to measure the effect of the relationship between the two or more variables and also shows the direction of the relationship between the dependent and the independent variables (Ghozali, (2013).

$Y = \alpha + \beta_1 * X_1 + \beta_2 * X_2 + \beta_3 * X_3 + \beta_4 * X_4 + e$

Where:

Y = Contractor Company Performance α = Constant

β= Independent Variable Regression Coefficient X1 = Ability to Work
X2 = Work Knowledge
X3 = Work Discipline
X4 = Technical Skills

5. Results and Discussion

5.1. Results

Model Summary[b]					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	0.725[a]	0,525	0,498	2,371	2,185
a. *Predictors: (Constant)*, Ability to Work, Work Knowledge,Discipline in Working, Technical Expertise					
b. Dependent Variable: Contracting Company Performance					

Table 2: Multiple Correlation Test

Based on table second demonstrate the R value is 0.725 or 72.5%. This shows that there is a strong and the positive correlation between the variables of work ability, the knowledge in working, discipline in working, and technical expertise on improving the performance of contractor companies. The adjusted R Square value is 0.525 or 52.5%. This means that 59% of the five variables are working the ability, knowledge, discipline, and the technical expertise while the remaining 41% is caused by other variables.

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	423,437	4	105,859	18,824	.000[b]
	Residual	382,399	68	5,624		
	Total	805,836	72			
a. Dependent Variable: Company Performance						
b. Predictors: (Constant), Technical Skills, Job knowledge, Workability, Work Discipline						

Table 3.F Test (Simultaneous Regression Test)

Based on the results of the processing in table 3 explains that the variables of work ability (X1), knowledge in working (X2), discipline in working (X3), and the technical expertise (X4) simultaneously affect the contractor company in the performance variable (Y). F count 18.824>F table 2.50 and a significance value of 0.000<0.1, it can be concluded that H02 is accepted.

Coefficients [a]									
Model		**Un standardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Co linearity Statistics**	
		B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
1	(Constant)	-0,197	3,779		-0,052	0,959		
	Work ability	0,770	0,164	0,446	4,701	0,000	0,776	1,288
	knowledge in Working	0,375	0,189	0,169	1,979	0,052	0,951	1,051
	Discipline in Working	0,417	0,166	0,251	2,522	0,014	0,704	1,420
	Engineering	0,558	0,242	0,200	2,307	0,024	0,925	1,081
a. Dependent Variable: Company Performance								

Table 4.T Test (Partial Regression Test)

Based on the multiple regression output on table above, the regression of equation can be formulated as follows: Y = -0.197+0.770*X1+0.375*X2+0.417*X3+0.558*X4

Based on the processing results on table 4, it's explained that the variables of work ability (X1), discipline in working (X3), and the technical expertise (X4), partially affect the performance variable of the contractor company (Y). Meanwhile, knowledge in working (X2) has no effect on the performance of contractor companies in TimorLeste (Y).The results of the work ability variable, it shows a t count of 4.701 > t table 1.995 with a significance value of 0.000 < 0.05, the results of the knowledge in working variable show that a t count 1.979 < t table 1.995 with a significance value of 0.052 >

0.05, the results of the discipline variable, The work shows that the t count value is 2,522 > t table 1,995 with a significance value of 0.014 < 0.05, the results of the technical expertise variable show that the t count 2,307 > t table 1,995 with a significance value of 0.024 < 0.05. With these results it can be concluded that HA1 is rejected and HA2 is accepted, HA1 is accepted and HA2 is rejected, HA1 is rejected and HA2 is accepted, and HA1 is rejected and HA2 is accepted.

5.2. Discussion

5.2.1. Workability

The perspective of human resource theory, work ability is one of the abilities possessed by an individual in a construction project. The construction industry, having the skills working is to manage, organize, and carry out construction projects, because having these abilities are very important for contracting companies. Regarding the disclosure of information by contractor companies in Timor Leste, many studies have conducted research regarding to this problem, their findings show that the work ability has a positive relationship with improving the performance of contractor companies. In this study, the measure of work ability shows that it has an effect on increasing company performance with the value of t = 4.701 and a significance value of 0.000 <0.05. This means that the work ability of employees owned by contractor companies in Timor Leste, greatly affects the improvement of company performance. Contracting companies in Timor Leste always improve the quality of their human resources, especially on the work ability of employees and provide the training at any time to improve the work skills of employees so they can help contractor companies in Timor Leste to complete their missions according to their goals.

5.2.2. Knowledge in Working

In this study, it's found that the knowledge in working has no effect and significant on improving the performance of contractor companies in Timor Leste with a t-value of 1.979 and a significance value of 0.052. This shows that knowledge in working has no significant effect on improving the performance of contractor companies in Timor Leste. Although it doesn't affect the performance of contractor companies in Timor Leste, it constantly improves knowledge for each employee by providing special training to each employee on the implementation of construction projects to do it easier for employees to understand the concepts and methods of construction inworking.

5.2.3. Work Discipline

The work discipline in working shows that it has a positive and significant effect on improving company performance with a value of t = 2.522 and the significance value of 0.014. This means that the discipline greatly affects the performance of contractor companies in Timor Leste. On implementing of construction projects in Timor Leste, the contractor companies constantly prioritize discipline because it is very important for the contractor companies. The discipline in working is not only seen from the effective and efficient completion of work but how an employee does the work with the existing rules in the contracting company. These findings, can be supported by (Ratnasari et al., 2021) who the discipline which had a significant positive effect on the performance of PT. International EMI. (Sekarsari, 2020) this research found that the aspect of human resources had the performance of construction project for the workers in the discipline, meanwhile (Esthi, 2020) who found discipline had a significant influence on the performance of PT. Lestarindo Perkasa.

5.2.4. Engineering

Technical skill is the capacity which possessed by an intellectually and physically. In this study, the technical expertise greatly affects the performance in improvement of the contractor companies in Timor Leste with a t-value of 2.307 and a significance value of 0.024. This means that the technical expertise has an effect on improving the performance of the contractor company in Timor Leste because in the contractor company in Timor Leste, the technical skills are very important and required to manage and implementing the construction projects which they can help the companies to complete the projects in accordance with the time, cost and quality.

6. Conclusion

Based on the results of the research above, it can be concluded that some important things such as follows:
1.The quality of human resources, namely work ability, the knowledge in working, the discipline in working, and the technical expertise in the implementation of construction projects in Timor Leste, simultaneously affect the performance on improvement of contractor companies in Timor Leste, therefore the contractor companies constantly manage their human resources and prioritize ability In working, the knowledge, the discipline, the technical expertise and honesty in construction projects, because these five aspects of human resources are in the implementation of construction projects.
2.The ability in working, discipline and the technical expertise in the implementation of construction projects in Timor Leste, partially affect the performance improvement of contractor companies in Timor Leste. Meanwhile, the knowledge variable partially does not affect and the significant in improving the performance of contractor companies in Timor Leste. Therefore, the contractor companies in Timor Leste constantly improve the quality of their human resources, especially in work ability, the discipline and technical expertise in order to pursue the success of construction projects and the quality of the company's performance. Although the knowledge in working has no significant effect on improving the performance of contractor companies in Timor Leste, the contractor companies in Timor Leste constantly prioritize these abilities which improve the skills in working but also to increase the knowledge for each employee, and providing special training

to each employee on the implementation construction projects for employees to understand the concepts and the methods of construction work.

7. Suggestion

Based on the conclusions above, which can be suggested several points under bellow:

- Improve the quality of human resources which consisting of the ability, the knowledge, the discipline, and the technical expertise, contractor companies must continue to carry out more routine training, provide detailed enlightenment to help the employees for understanding on the implementation of construction projects.
- For the further research, the researchers are advised to do further research on the variables of the quality of human resources where the researcher has not summarized from this study or this paper.

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