The Effect of Adopting Management System on Employee Performance

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ABSTRACT

There has been a shift in the needs of people and organizations that were originally material needs, now they are information needs. Especially the current workers, showing that 70% of workers there are knowledge workers and make knowledge the most useful resource at present. This study uses a quantitative approach with knowledge management independent variables consisting of people, knowledge sharing and technology and the dependent variable, namely employee performance. Sample was done by random sampling methods and sampling proportional technique, and the total sample produced was 70 people. The test uses validity, reliability and data analysis tests using ANOVA.

KEYWORDS: Knowledge Management System, Employee Performance, Anova

1. Introduction

Individual and organizational needs are always evolving, and this phenomenon in the information age is changing the needs of individuals and organizations from material to information. Characterized by 70% of employees in developed countries are knowledge workers of knowledge [1]. In the process of development of information technology and science knowledge to be important to lack of information and knowledge as the main source in supporting the educational process for institutions in the field of organizations [2].

The researchers Cho & Korte (2014) and Tubigi & Alshawi, (2015) claimed that knowledge has successfully motivated the organizations to move towards the use of knowledge management [3]; [4]. Knowledge has been considered as global economy transformation center [5]. Besides, it is also an important source of wealth and key for the organizations to stay competitive in business environment [6]. Knowledge management has become a main key to create customer values. This has led to the consideration of knowledge as strategic source for organizations. To implement and make full use of knowledge management, the organizations must have a clear understanding on how knowledge is formed, disseminated, and applied within organizations [7].

Knowledge management helps to create and propagate information and knowledge. It also provides a sufficient, effective, and efficient use of knowledge to provide a strategic competitive advantage for organizations [8]; [9]; [10]; [11]. Researchers Lee & Lan (2011); Liu & Deng (2015) also said that knowledge is an important success factor that helps the organizations to gain a sustainable competitive advantage [12]; [13].

The phenomenon that occurs, often employees show less than optimal performance. This can be illustrated in the action, which is the average value of the employee's work decreases. Here the average graphic from 2016-2018.
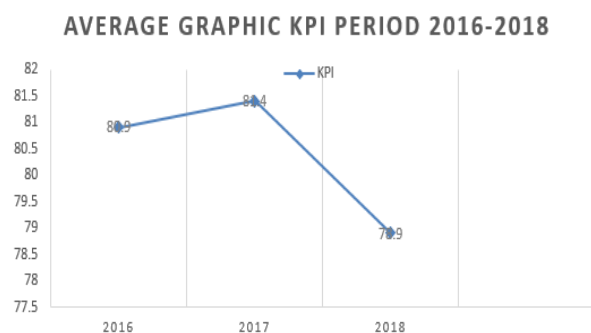

Figure 1. Average Graphic Key Performance Indicators

It can be seen on the graph that between 2016 and 2017 there was an increase in performance while in 2017 to 2018 there was a decrease. the issue of performance degradation is at the core of this study by using KMS whether employee performance can increase or not. In this research, organization has two types of employees, namely officer and non-officer employees. Employee officers are permanent employees who get basic education and have career opportunities within the company.

2. Literature Review
2.1 Knowledge Management System

Knowledge is a vital asset and a significant resource of any organization; it conveys meaning and hence tends to be much more valuable, yet more ephemeral [14]. Knowledge management contents typically focus on firm's strategic objectives such as innovation, improved performance, competitive advantage, as well as success stories and lessons learned. Hence, Knowledge Management Systems (KMS) can play a significant role in improving organizational and individual performance. Considered as the memory of the organization by leveraging the collective knowledge of the company from one project to another, substantial investments are done in technology infrastructure for KMS. Yet, little is known about return on investment for KMS, in terms of impact on employees and organization performance [15]; [14].

KMS incorporates create and capture new knowledge, support, and facilitate content management, and share and re-use knowledge to generate value [16]. Therefore, individual contributions, technology acting, and task structure are three of the main aspects of KMS [17]. There is an increasing need within organizations to comprehend the antecedents of KMS usage and impact on employees' performance from the perspective of these various aspects [18]; [16]; [19]. As stated, component knowledge management revealed there are three as follows:

a. People

The key to success in Knowledge Management is to give someone visibility, recognition, and credit that everyone he as an "expert" in their respective fields as well as utilizing their expertise (knowledge) for business success. This is achieved through a combination of motivation / recognition and appreciation, structuring back in the performance appraisal system, and other measurement systems.

b. Knowledge Sharing

This component includes the contribution of knowledge, content management (receive content, maintain quality, maintain current content, delete or archiving obsolete content), rediscovery, membership in the practice community, project implementation is based on reuse knowledge, methodology and standard formats (rules) for documenting best practices and case studies, etc. Thing it is important to make the process so that the process is understood as clearly and as simple as possible by employees throughout the organization.

c. Technology

Technology in KM as a solution to provide functionality in supporting knowledge sharing, collaboration, workflow, management documents in the company. Technology provides a central / main space safe for employees, customers, partners in exchanging information, sharing knowledge and guide one another to produce better decision. The most popular form of KM technology is a knowledge portal on Company Intranet.

2.2 Employee Performance

Employee performance can be interpreted as an outcome and effort someone has achieved with the ability and actions in certain situations. The grading gives an understanding that employee performance is a few outputs of outcomes produced by employees both in the form of material

(quantitative) and non-material (qualitative) forms [20].

The importance of performance appraisal according to Werther & Davis, among others, is an effort to provide opportunities for employees to take corrective actions and improve performance through feedback provided by the organization. Performance appraisal can also help the organization in carrying out career planning for employees and aligning it with the organization's interests. In addition, performance appraisal can also identify weaknesses in the placement process, which is not good performance indicates a weakness in placement so that improvements can be made. Internal employee performance appraisals can help employees to overcome internal problems. This means that the performance appraisal conducted by superiors will provide information to employees about what is the reason why the employee's performance is bad, so that superiors can provide solutions and input [20]. Bernardin and Russel [21] proposed 6 criteria that could be used:

1) Quality, is the level of the process or results of implementation activities approaching the expected goals
2) Quantity, is the amount generated and the activity cycle done
3) Timeless, is the extent to which an activity is completed on time as desired, considering the coordination of other outputs as well available time for other people's activities
4) Cost effectiveness, is the level of the use of resources organizational power (human, financial, technological, material) is maximized to achieve the highest yield or loss reduction of each unit use of other people's activities
5) Need supervision, is the degree to which a worker can perform a function of work without the need for supervision supervisor to prevent undesirable actions

6) Interpersonal impact is the degree to which employees maintain self-esteem, good name, and cooperation among colleagues.

Of the six criteria, there is one criterion that is not relevant to use in this study, these criteria are cost effectiveness. No relevance of these criteria because these criteria can only be measured by management level employees or company leaders, not measured by operational employee. In this study operational employees become part of the research sample.
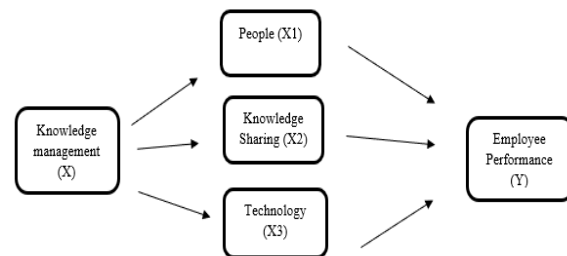
2.3 Framework

Figure 2. Framework

Hypothesis

H0: Knowledge management variable consisting of variables, people, knowledge sharing, and technology has no effect on employee performance.

H1: Knowledge management variables consisting of variable people, knowledge sharing, and technology has an influence on employee performance

3. Methodology

The method used in this research is explanatory survey. The population in this study is that all employees in the company Total of office employees amounted to 226 people. Samples were taken by method random sampling or probability sampling with a systematic sampling technique that is by sequence number from the population list and using the technique proportional sampling with a precision value of 10% per division, the most important in this technique

is the use of balanced representation, by knowing in advance the number or size of existing population units. The reason researchers took this technique is because the sample chosen is respondents in several work units that are located.

The research instrument used in this study was a questionnaire. Data collection techniques used are primary data and secondary data. Primary data can be obtained through questionnaires, literature studies and observations directly on location (observation) and interviews.

In quantitative research, data analysis is carried out in several processes which includes editing, coding, tabulating. This analysis activity of course uses a calculation tool with a statistical test, which functions simplifying the large amount of research data into information which is easier to understand. Following are some of the tests carried out in Test the data in this study:

1) Validity Test

Validity Test, this test is carried out to test the accuracy or failure of an instrument research using Pearson product moment correlation. Bullet the question is said to be valid if the value of r count > r table or the value of $p < 0.05$.

2) Reliability Test

This test is useful to show that the questionnaires used are consistent when used to measure the same symptoms elsewhere. Accordingly, This brief test aims to assess the consistency of objects and data. In this study, the reliability test uses an internal consistency method with using the split technique from Spearman Brown.

3) Multiple Linear Regression Test

Multiple linear regression test was performed with the aim of analysing the effect two or more independent variables with respect to one dependent variable to prove it exists whether or not a functional relationship or causal relationship between two or more independent variable with one dependent variable.

The formula used for three independent variables:

$$Y = a + b1\ X1 + b2\ X2 + b3\ X3$$

4) Hypothesis testing

Testing this hypothesis on the value of establishing a null hypothesis and hypothesis alternative, statistical test research and calculation of the value of statistical tests, calculations hypothesis, the determination of a significant level and conclusion drawing. The hypothesis used is the null hypothesis (Ho) there is no influence between the independent variable and the dependent variable, an alternative hypothesis (Ha) exists the influence of the independent variable with the dependent variable. Before done hypothesis testing, in this study the significance level used was 5% with a confidence level of 95%. The significance level is determined by consider the sample size in this study. Next, test the hypothesis which will be carried out in this study using the following test:

a) t test

This test is carried out with the aim of seeing a partial relationship between independent variable with a bound variable by assuming that variable other freedoms are considered permanent. Testing the hypothesis of this study aims to examine the presence or absence of influence between knowledge management as an independent variable (X) with variables namely people (X1), knowledge sharing (X2), technology (X3) on employee performance as the dependent variable (Y). If (Ho) is accepted, then there is no partial the effect whereas if the results (Ha) are accepted then partially their influence.

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b) f test

This F test is carried out to determine the effect of all the independent variables together (simultaneously) to the dependent variable. In this study, test F is used to test the significance of the influence of people, process, technology jointly on employee performance.

c) Proof of Dominant Influence

As in the formulation of the problem of this study, of the five variables in the measurement of knowledge management, which variable most influences the employee's performance as a dependent variable, then that is what will be discussed as the most influential variable. This result can be seen from t test results, which t test is used to test one by one variable independent variable. The variable that has the biggest t is the one has the most influence on the dependent variable.

4. Results and Discussion
4.1 Validity and Realibility Test

Table 1. Results Validity & Reliability Test

Variable	Cronbach Alpha	r table	information
People	0,912	0,2369	Reliable
Knowledge sharing	0,890	0,2369	Reliable
Technology	0,806	0,2369	Reliable
Employee performance	0,823	0,2369	Reliable

Based on the table above, it can be seen that the results of the Cronbach alpha value each variable in this study > from the value of r table, therefore all the variables in this study are valid and reliable.

4.2 Linier Regression

In this study consists of three independent variables, namely people (X1), knowledge sharing (X2), Technology (X3). Following are the results of multiple linear regression tests on this research :

Table 2.
Results of Multiple Linear Regression Test Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	16.864	6.709		2.514	0.14		
People	.118	.128	.101	.927	.358	.354	2.822
knowledge Sharing	.101	.186	.075	.543	.589	.219	4.560
Technology	1.092	.192	.709	5.692	.000	.270	3.698

Dependent Variable: employee_performance

Table 3. Results of R tests Multiple Linier Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.853	.727	.714	4.56484

Predictors: (Constant), Technology, Knowledge sharing, People

The multiple linear regression model in this research is as follows:

$$Y = 16{,}864 + 0{,}118X1 + 0{,}101X2 + 1{,}092X3$$

R value of 0.853 indicates that the relationship of performance variables employees with variable people, process and technology are strong R square value of 7.27 which also shows that the relationship between employee performance with people, process and technology variables is strong. R square 0.727, which means the magnitude of the influence of variables people, process, and technology on employee performance variables of 72.7% and the remaining 27.3% is influenced by other variables outside the model this research.

4.3 T test

This test is carried out with the aim of seeing a partial relationship between the independent variable and the dependent variable by assuming that the variable other freedoms are considered permanent. The following t-test results in this study:

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Table 4. t Test Results

Variable	t count	t table	Statement H0
People (X1)	7,675	1,667	Rejected
Knowledge sharing (X2)	9,465	1,667	Rejected
Technology (X3)	13,067	1,667	Rejected

4.4 F test

This F test was conducted to determine the effect of all independent variables together (simultaneously) on the dependent variable. In this study, the F test was used to test the significance of the influence of people, knowledge sharing, technology together on employee performance.

Table 5. Results F Test Anova

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3606.500	3	1202.167	57.692	.000a
Residual	1354.457	65	20.838		
Total	4960.957	68			

Based on the table above, it is known that the calculated F value of 57.692 which means greater than F table 2.75 with a significant level of 0.05.

It was concluded that H0 was rejected while H1 was accepted. So that simultaneously (simultaneously) the independent variable (X) has a significant effect on the dependent variable (Y). It can be concluded that the people, knowledge sharing and technology variables together influential and can be used to predict employee performance.

4.5 Proof of Dominant Influence

Proving the dominant influence of the three independent variables (X) on the dependent variable (Y), can be known using the value of t on each independent variable. The following results are the values of each variable t:

Table 6. Proof of Dominant t Test

Variable	t count
People (X1)	7,675
Knowledge Sharing (X2)	9,465
Technology (X3)	13,067

Based on the table above, it is concluded that the dominant influence is the technology variable (X3), it can be seen from the t value amounting to 13,067. Consequently, the other independent variables that have dominant influence are the knowledge sharing variable (X2) and people (X1).

5. Conclusion

This study examines the effect of knowledge management system on employee performance in companies engaged in building material manufacturers. Based on testing, data analysis and discussion that has been done, the results of this research based on testing that has been done, it is known that the variable knowledge management includes people (X1), process (X2), technology (X3) together have a significant effect on performance employees. With results that are in line with Knowledge management itself is applied to be a solution in solving company problems, with the result achieving goals and visions that are expected, which are measured from three components, that is people, knowledge sharing and technology.

suggestions for further research is that in every knowledge management activity, especially knowledge sharing, indicators of success must be agreed upon together, focused on services and based on sensitivity each employee to the customer service environment. It is important to determine because services are more difficult to set limits than goods, so that it triggers sensitivity employees and generate innovative ideas to achieve success and can improve the quality of knowledge sharing activities.

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