

The Effect Of Work Motivation And Knowledge Management
On Increasing Innovativeness

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Abstract.
This study aims to analyze the effect of work motivation and knowledge management on increasing the innovation of ASN at the Central Ministry of Transportation. The number of samples in this study were 249 respondents using the slovin technique from all units in the Ministry of Transportation. Data was collected using questionnaires, observations and interviews with related parties. The data analysis technique used is the mix method with multiple linear regression analysis and indicator analysis. The results showed that the variables of Work Motivation and knowledge management partially and simultaneously had a positive effect on Employee Innovativeness at a significance level of 0.05 with a regression coefficient of respectively. The value of the regression equation is $Y = 42.013 + 0.490X_1 + 0.166X_2$, this indicates that an increase in one level of Work Motivation will result in an increase in Innovativeness of 0.528 at a constant 42.013, and each increase in one level of Knowledge Management will result in an increase in Innovativeness 0.132 at a constant 42.013. With an adjusted R-Square value of 0.282, it means that the effect is 28.2%. Thus, strengthening work motivation and knowledge management together with innovation will increase employee innovativeness.

Keywords: Work Motivation, Knowledge management, and, Innovativeness

I. INTRODUCTION

Employees who have high motivation will contribute and be more enthusiastic in innovating in their organization. Meanwhile, there is a decrease in the work motivation of employees of the Ministry of Transportation which can be reviewed in the following table:

Table 1. Achievement of Public Service Performance Targets

Performance Indicator	Realization 2019	Target	Realization 2020	Target
Community Satisfaction Index	94,84%	80%	88,24%	100%

Source : Ministry of Transportation Sub-Section Program (2020)

Based on the table above, it shows the achievement of the Public Service Performance target with performance indicators showing that the realization of the achievement has reached the set target. The community satisfaction index (IKM) is data and information about the level of community satisfaction obtained from the results of qualitative and quantitative measurements of people's opinions in obtaining services from the public service administration apparatus by comparing their expectations and needs. Based on the table above, in 2020, the realization results of 88.24% compared to 2019 which reached 94.84%, which means there is a decrease in 2020 of 6.6%. In an effort to create employee motivation, it can be seen from the achievement of work results both in quality and quantity in carrying out their work in accordance with the job descriptions of each section. The Ministry of Transportation needs to mobilize and monitor its employees so that they can develop all their capabilities. To move employees to conform to what is desired by the organization, it is necessary to understand employee work motivation, because it is this motivation that determines the behavior of employees at work.

Motivation questions how to encourage the enthusiasm of subordinates, so that they are willing to work hard by giving all the abilities and skills to realize organizational goals. Providing motivation is very important in every organization, with motivation being the thing that causes, distributes, and supports employee behavior to work hard to achieve maximum results. Employees who have high work motivation will be able to encourage themselves to work harder and are always inspired and enthusiastic in completing their tasks. A good employee will definitely continue to be motivated and contribute to the success of the organization. In addition to work motivation, knowledge management is very much needed for employees as an employee support system for readiness and speed in working which is obtained from the knowledge management process. The process of exchanging knowledge and information, one of which can be obtained through training with target participants according to the needs of the agency, the following is a table of training as an implication of a decline in the Knowledge Management process at the Ministry of Transportation. The sample taken in this research is Esselon 3 and 4 as policy executor and people who carry out activities directly execute all program activities.

Table 2. Table of Participants in Education and Training of Human Resources for Transportation Apparatus in 2016 - 2020

No	Description	2016	2017	2018	2019	2020	2020
		(1)	(2)	(3)	(4)	(5)	(6)
1)	Stub Education Degree (S2/S3)		66	75	24	4	-
	Pre-service Training		-	10	38	1.	16
	Leveling Training		3	3	095	0	
	Short Course	0	15	93	1.	18	5.
	Overseas Training	216	6.	-	8.	8.	4.
	Total	432	6.	27	9.	9.	10

Based on the table above, it can be concluded that the education and training carried out by employees decreased in 2017 and 2019. The Secretariat of the Transportation Human Resources Development Agency did not hold overseas training due to the absence of an overseas training budget. So that the Knowledge Management process is not good and not optimal. The realization of training participants in 2020 increased by 617 participants (5%) from 2019. The decrease in the realization of the number of training participants when compared to 2019 was from Pre-service Training, where in 2020 the Center for Human Resources Development of the Transportation Apparatus did not hold the training due to the covid pandemic. -19. Based on the order of the problems, the researcher is interested in drawing the title "EFFECT OF WORK MOTIVATION AND KNOWLEDGE MANAGEMENT ON INCREASING INNOVATIVENESS".

II. LITERATURE REVIEW

Work Motivation

According to Gibson (2012: 123-126) Motivation is a concept that describes the forces acting on or within a person to initiate and direct behavior. The concept is used to explain differences in the intensity of behavior, and also to indicate the direction of behavior. There are two motivational factors; 1) A set of extrinsic conditions, work context. This includes salary, status, and working conditions. 2) A set of intrinsic conditions, job content. These conditions include feelings of accomplishment, increased responsibility, and recognition.

Knowledge Management

According to Marquardt (2012: 247) KM is an organizational activity (organizational members) in collecting, organizing, storing, transferring and using knowledge and experience inside and outside the organization. The main elements are; 1) Collecting: knowledge gathering, 2) Storing: documentation and storage of knowledge, 3) Transfer among members: exchange and transfer of knowledge between members of the organization, 4) Application: application of knowledge in work, 5) Distribution/Dissemination: successful distribution of knowledge applied.

Innovativeness

According to Taylor (2017:128-146), Innovation is the creation and implementation of new processes, products, services, and delivery methods that result in significant improvements in results, efficiency, effectiveness or quality. The indicators of innovation are 1) Process innovation is a process that aims to produce something of value that can be traded, developed and exploited commercially, 2) Service innovation is a change that can be developed through the development of ideas from the organizational or public sector.

III. METHODS

In research, data collection activities are the most important stage. Before collecting data, it is necessary to determine the population of the research object first.According to Sugiyono (2009, p. 117) said that the population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. Meanwhile, according to Fatoni (2006, p. 103) the population is the entire elementary unit whose parameters will be estimated through statistical analysis results conducted on the research sample. As explained in the limitation of the problem, the population of this study was only 714 non-structural employees of the Secretariat General of the Ministry of Transportation. According to Sugiyono (2009, p.118) the sample is part of the number and characteristics possessed by the population. Samples taken from the population must be truly representative (representative). The sampling

technique used in this study is a proportional random sampling technique, so that each research unit or elementary unit of the population has the same opportunity to be selected as a sample. Determination of the amount using the Slovin formula,

$$n = \frac{N}{1 + N(e)^2}$$

n : Sample
N : population
e² : Error rate (5%)

The total population of the Central Ministry of Transportation's employees is 714 people. The number of samples is as follows:

$$n = \frac{714}{1 + 714 (0,05^2)}$$

n=248.3 then rounded to 249 The number of samples in this study was determined by 249 employees. Data analysis method that is using the Normality Test ,homogeneity test, linearity test, simple regression test, multiple regression test, hypothesis test and ANOVA test.

IV. RESULTS

Normality Test Results

The normality test of the data can be done by using the One Sample Kolmogorov Smirnov test, with the condition that if the significance value is above 5% or 0.05 then the data has a normal distribution. Meanwhile, if the results of the Kolmogorov Smirnov One Sample test produce a significant value below 5% or 0.05 then the data does not have a normal distribution. The normality test in this study had a significant value of residual x1, namely 0.128 > 0.005. significance value above 5% or 0.05 then the data has a normal distribution. The significance value of residual x2 is 0.457 > 0.005. significance value above 5% or 0.05 then the data has a normal distribution. then the data has a normal distribution.

Homogeneity Test

The Glejser test is carried out by regressing the independent variable with the absolute residual value (ABS_RES). If the significance value between the independent variable and the absolute residual is more than 0.05, then there is no heteroscedasticity problem. Based on the results of the study, the significance value between the independent variables x1 is 0.126 with an absolute residual of more than 0.05, so there is no heteroscedasticity problem. The significance value between the independent variables x2 is 0.927 with an absolute residual of more than 0.05, so there is no heteroscedasticity problem.

Linearity Test

Table 3. Results of Linearity Test for Variable X1 against Y

ANOVA						
y			Sum of Squares	df	Mean Square	F
Between Groups	(Combined)		19530.469	48	406.885	3.298
	Linear Term		11530.866	1	11530.866	93.456
	Weighted Deviation		7999.603	47	170.204	1.379
Within Groups			24676.495	200	123.382	
Total			44206.964	248		

Thus, it can be interpreted that the regression equation model of t over X1 is linear and the linearity requirement is met with the value of Sig. Deviation 0.68 > 0.005. This means that a simple linear regression model can be used to predict the level of employee innovation which is influenced by the work motivation variable.

Table 4. Results of Linearity Test for Variable X2 against Y

ANOVA						
y			Sum of Squares	df	Mean Square	F
Between Groups	(Combined)		11823.927	53	223.093	1.343
	Linear Term		2267.967	1	2267.967	13.657
	Weighted Deviation		9555.960	52	183.768	1.107
Within Groups			32383.037	195	166.067	
Total			44206.964	248		

Thus, it can be interpreted that the regression equation model, the regression t over X2 is linear and the linearity requirement is met with the value of Sig. Deviation $0.307 > 0.005$. This means that a simple linear regression model can be used to predict the level of Employee Innovation which is influenced by Knowledge Management.

Table 5. Comparative relationship between variables

Relationship between Variables	Value of Sig.deviation Linearity	Conclusion
Y – X1	0,68	The p value > 0.05 means that the regression equation between Y and X1 has a linear pattern.
Y – X2	0,307	The p value > 0.05 means that the regression equation between Y and X2 has a linear pattern.

Simple Regression Test

Table 6. Regression Between Work Motivation and Innovation

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	57.540	8.221		6.999	.000
x1	.550	.059	.511	9.336	.000

a. Dependent Variable: y

Based on the table above, it is known that the slope constant (a) is 57.540 with a regression coefficient (β) of 0.550 so that the regression equation formed between the variables of Work Motivation and Innovation is $Y = 57.540 + 0.550X_1$.

Table 7. Regression Similarities Knowledge Management and Innovation

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	108.581	7.001		15.510	.000
x2	.180	.049	.227	3.655	.000

a. Dependent Variable: y

Based on the table above, it is known that the slope constant (a) is 108,581 with a regression coefficient (β) of 0.180 so that the regression equation formed between Knowledge Management and Innovativeness variables is $= 108.581 + 0.180X_2$.

Multiple Regression Test

Table 8. Multiple of Regression of Work Motivation and Knowledge Management together towards innovation

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	42.013	9.547		4.401	.000
x1	.528	.058	.490	9.041	.000
x2	.132	.043	.166	3.058	.002

a. Dependent Variable: y

Based on the table above, it is known that the slope constant (a) is 42.013 with a regression coefficient (β) X1 of 0.528 and a regression coefficient of (β) X2 of 0.132 so that the regression equation formed between the variables of Work Motivation and Knowledge Management with innovation. that is $= 42,013 + 0,528X_1 + 0,132X_2$.

Hypothesis test

Table 9. The Results Of The T Test Between The Variables Of Work Motivation And Innovation

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	57.540	8.221		6.999	.000
x1	.550	.059	.511	9.336	.000

a. Dependent Variable: y

$t_{table} = t(a/2 : n-k-1) = (0.0025:247) = 1.969$ Given the value of Sig. The effect of X1 on Y is 0.000 <0.05 and the t value is $9.336 > t_{table} 1.969$. So it can be concluded that H1 is accepted which means that there is an effect of X1 on Y.

Table 10. The Results Of The T Test Between The Variables
Of Knowledge Management And Innovation

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	
1	(Constant)	108.581	7.001		15.510
	x2	.180	.049	.227	3.655

a. Dependent Variable: y

Given the value of Sig. The effect of X2 on Y is 0.000 <0.05. $t_{table} = t(a/2 : n-k-1) = (0.0025:247) = 1.969$ and the t-count value is $3.655 > t_{table} 1.969$. So it can be concluded that H1 is accepted which means there is an effect of X2 on Y

Table 11. The Results Of The T Test Between The Variables
Of Knowledge Management And Innovation

ANOVA ^a					
Model		Sum of Squares	df	Mean Square	F
1	Regression	12727.750	2	6363.875	49.732
	Residual	31479.214	246	127.964	
	Total	44206.964	248		

a. Predictors: (Constant), x2, x1

b. Dependent Variable: y

$F_{table} = f(k:n-k) = F(2:247) = 3.032$. Given the value of Sig. For the effect of X1 and X2 simultaneously on Y is 0.000 <0.05. and the calculated F value is $49,732 > F_{table} 3,032$. So it can be concluded that H3 is accepted which means that there is an effect of X1 and X2 simultaneously on Y.

V. CONCLUSION

Based on the results of the study, it can be concluded that this research has found efforts to increase the innovation of employees of the Central Ministry of Transportation through strengthening work motivation, knowledge management, with the identification results as follows:

1. There is a positive and significant effect of work motivation on increasing innovativeness as indicated by the regression coefficient (β) 0.550 with the resulting regression equation, namely $Y = 57.540 + 0.550X_1$. which means that every increase in one level of Work Motivation will result in an increase in Innovativeness of 0.550 at a constant 57.540. Thus, work motivation is predicted to increase employee innovation.
2. There is a positive and significant effect of Knowledge Management on Innovativeness which is indicated by the regression coefficient value (β) 0.180 with the resulting regression equation is $Y = 108.581 + 0.180X_2$ which means that every increase in one level of Knowledge Management will result in an increase in Innovativeness of 0.180 in constant 108,581. Thus, knowledge management is predicted to increase employee innovation.
3. There is a positive and significant effect of Work Motivation and Knowledge Management together on Innovativeness which is indicated by the value of the regression equation is $Y = 42.013 + 0.490X_1 + 0.166X_2$, this indicates that an increase in one level of Work Motivation will result in an increase in Innovativeness of 0.528 at a constant of 42,013, and every increase in one level of Knowledge Management will result in an increase in Innovativeness of 0.132 at a constant of 42,013.

VI. SUGGESTION

In this study, the findings obtained must be improved so that employee innovation can increase to the maximum. Research suggestions for indicators that are already good can be maintained, while indicators that are not good for improvement are as follows:

Order Priority Indicator For Fixed Soon Priority For Fixed Soon	Necessary Indicators Maintained or Developed
Work Motivation ($\beta = 0,550$) 1. Rewards 3,61 2. Satisfaction 3,76 3. Job Security 3,76 4. Personal Feeling 3,78 5. Working Condition 3,82	Work Motivation ($\beta = 0,550$) 1. Interesting work 4,21
Knowledge Management ($\beta = 0,180$) 1. Knowledge Storing 3,69 2. Knowledge distribution 3,86	Knowledge Management ($\beta = 0,180$) 1. Knowledge Transfer 4,14 2. Knowledge Aplication 4,13 3. Knowledge acquisition 4,06
Information and communication technology ($\beta = 0,136$) 1. Nilai – Nilai 3,97	Information and communication technology ($\beta = 0,136$) 1. Hardware 4,17 2. Komunikasi Teknologi 4,16 3. Software 4,15

The following are suggestions that can be made by making improvements to several research variables and indicators that are still low and maintaining or developing indicators that are already good.

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