
Transformational Leadership, Innovative Climate, and Employee Creativity in Rattan Craftsmen MSMEs

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Abstract

Objective – This research aims to provide an empirical explanation of the influence of transformational leadership on employee creativity with an innovative climate as an intervening variable.

Design/Methodology/Approach – This research method is a descriptive-quantitative research approach. The research location was 6 (six) MSME Rattan Craftsmen in Palangka Raya City, totaling 71 people, with the sampling technique used being a saturated sampling technique. The collected data was analyzed using the Structural Equation Modeling (SEM) approach with the Partial Least Square (PLS) approach. The software used was SmartPLS 3.3.3.

Findings – The research results show that Transformational Leadership has a positive and significant effect on Employee Creativity, Transformational Leadership has a positive and significant effect on Innovative Climate, Innovative Climate has a positive and significant effect on Employee Creativity, Innovative Climate is able to act as an intervening in the relationship between Transformational Leadership and Employee Creativity.

Implications – The leadership of UMKM Rattan Craftsmen in Palangka Raya City can hold discussions to stimulate new ideas, then provide recognition and rewards for creative contributions. Leaders can also model creative thinking and innovation as leaders, and ensure employees have the resources they need to realize their ideas.

Keywords: Transformational Leadership, Employee Creativity, Innovative Climate

INTRODUCTION

The competitive nature of today's business environment has driven businesses to revitalize their products and services to address rapidly changing customer demands. For businesses to survive and remain relevant in today's customer-driven environment, new ideas through an innovative climate have become a key source of competitive advantage (Hon 2012).



Palangka Raya is the capital of Central Kalimantan province which has a variety of products from small and medium businesses managed by the community, generally made from natural raw materials. One example is rattan crafts which can be made into fashion products such as bags, shoes, wallets and belts. The advantage of this product is that it can live in dry and rainy (tropical) conditions. So this rattan craft product has become a favorite source of livelihood in the city of Palangka Raya.

The problems faced by MSMEs in Palangka Raya only include the capacity and quality of talent, low creativity and ability to adapt to new production designs. To increase the competitiveness and design of rattan products, MSMEs in the city of Palangka Raya need to improve the design of newer and more attractive rattan craft products in order to be able to compete with other rattan product craftsmen. One of the MSME rattan craftsmen Dare to open an export market to Japan, this can be developed. So that the export market accepts rattan products to increase creativity.

Some researchers believe employee creativity can be supported by leadership style, as leaders primarily seek to promote employees' creative abilities so that they can provide creative solutions to problems (Mittal and Dhar 2015). In particular, transformational leadership is closely related to creativity, because it can inspire subordinates to exceed their abilities by providing better ways of completing tasks and solving problems (Cheung and Wong 2011).

Influence Transformational Leadership on Employee Creativity

According to Oldam & Chummings (in Shafi et al.: 2020) transformational leadership is considered one of the important factors that influence employee creative behavior. (Shafi et al: 2020) also stated that leaders who embrace transformational leadership will support their subordinates to overcome feelings of afraid of the risks they will take and will routinely change their routine way of working which will then trigger a higher level of employee creativity.

H1: Transformational Leadership Has a Significant Influence on the Employee Creativity of Palangka Raya Rattan Crafts Employees

Transformational Leadership influences the Innovative Climate

Asbari, Fayzhall, et al., (2020) and Asbari, Purwanto, et al., (2020) findings that transformational leadership variables influence innovative behavior.

H2: Transformational Leadership has a Significant Influence on the Innovative Climate of Palangka Raya Rattan Craft Employees

Influence Innovative Climate on Employee Creativity

Yuwono et al., (2020) said that Individual Creativity is something that is flexible and dynamic so that members can apply Individual Innovative Behavior. Previous research was also conducted by Slåtten et al., (2019) which found that there was a positive influence between Individual Creativity on Individual Innovative Behavior.

H3: The Innovative Climate has a Significant Influence on the Employee Creativity of Palangka Raya rattan craftsmen's employees.

Influence transformational leadership on employee creativity with an innovative climate as mediation

Several researchers findings have several implications both in theory and practice (Albert Puni, Sam Kris Hilton, Ibrahim Mohammed, Eric Sanford Korankye: 2020). From a theoretical

perspective, these findings highlight the influence of transformational leadership on organizational performance through the mediating effect of innovative climate. This expands our understanding of organizational climate theory supporting the idea that innovative climate is important for organizational outcomes. In this regard, this research provides empirical support for the proposed conceptual model that identifies innovation climate as an important channel through which transformational leaders can positively influence organizational performance. (Hayes 2018), it was found that all dimensions of transformational leadership have a direct positive and significant influence on organizational performance. At the same time, innovative climate significantly mediates the causal relationship between all dimensions of transformational leadership and organizational performance, thereby creating a greater indirect influence of transformational leadership on organizational performance. compared to its direct impact.

H4: *Transformational Leadership has a Significant Influence on Employee Creativity with an Innovative Climate as mediation.*

The framework in Figure 1 below illustrates the flow of the research which is described as follows: Formulation of the problem of Transformational Leadership and Innovative Climate on the Creativity of rattan craftsmen employees in Palangka Raya MSMEs, based on the variables Transformational Leadership (X) Creativity (Y) and Innovative Climate (Z) analysis tools and conclusions drawn.

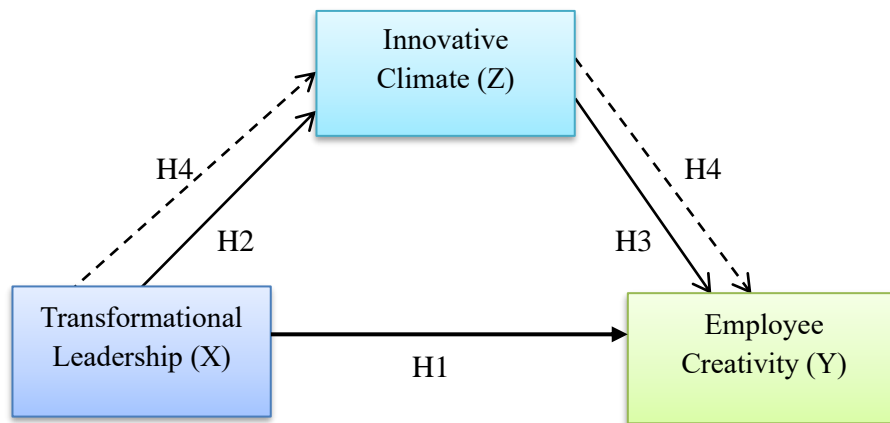


Figure 1. Conceptual Framework

METHODS

The type of research is quantitative, namely describing and explaining the influence of Transformational leadership on the creativity of MSME employees with an innovative climate as Intervening. The population in this study was 71 employees from 6 Rattan Craftsmen MSMEs in the city of Palangka Raya.

Considering that the population is only 71 employees, the researcher used a saturated sampling technique. According to Sugiyono (2017) saturated sampling is a sample determination technique when members of the population are used as samples. This is often done when the population is relatively small, less than 30 people, or research that wants to make generalizations with very small errors.

RESULTS AND DISCUSSION

The measurement model carried out using questionnaire data tabulation using results can be seen in Figure 2 below:

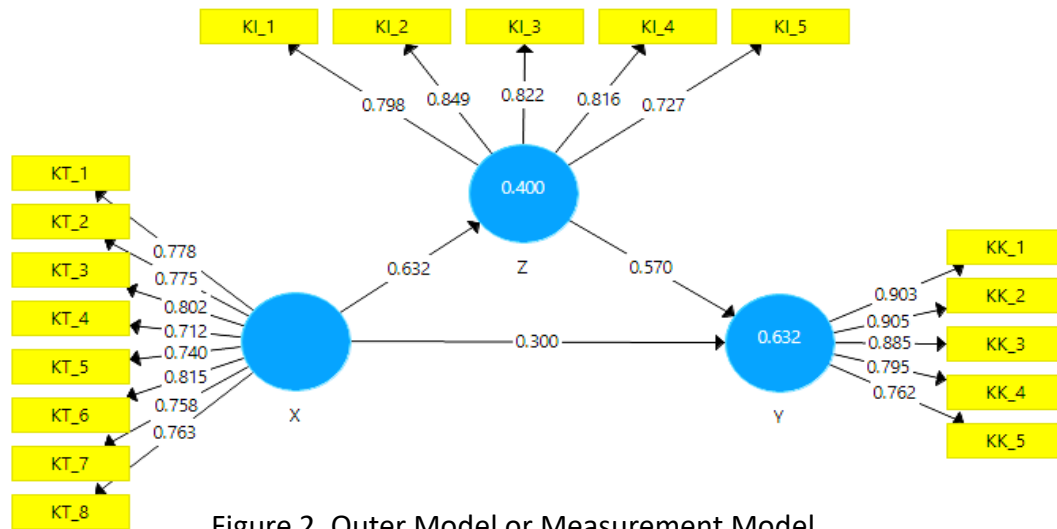


Figure 2. Outer Model or Measurement Model

The results of the research on the Outer model or measurement model above. The results showed that many of the research variable indicators had an outer loading value ≥ 0.05 , so they were declared sufficient to meet the requirements. So, the research instrument was then tested through validity and reliability testing which was assessed from outer loading, AVE (Average Variance Extracted), cross loading, Cronbach's alpha and composite reliability. So the evaluation of the results of the outer model or measurement model can be seen in table 1 below:

Table 1. Evaluation of the Measurement Model/Outer Model

Latent Variables	Indicator	Outer Loading	Composite Reliability	AVE	Cronbach's Alpha	Cross Loading	Fornell Larcker Criterion
Transformational leadership	KT_1	0.778	0.920	0.590	0.901	All indicator values for the variable are > than the indicator value On other variables	AVE Root Value> from Correlation Value
	KT_2	0.775					
	KT_3	0.802					
	KT_4	0.712					
	KT_5	0.740					
	KT_6	0.815					
	KT_7	0.758					
	KT_8	0.763					
Employee Creativity	KK_1	0.903	0.929	0.726	0.905	All indicator values for the variable are > than the indicator value On other variables	AVE Root Value> from Correlation Value
	KK_2	0.905					
	KK_3	0.885					
	KK_4	0.795					
	KK_5	0.762					
Innovative Climate	KI_1	0.798	0.901	0.646	0.862	All indicator values for the variable are > than the indicator value On other variables	AVE Root Value> from Correlation Value
	KI_2	0.849					
	KI_3	0.822					
	KI_4	0.816					
	KI_5	0.727					

Outer loading

Outer loading is the correlation between each measurement item and the variable. This measure describes how well the items reflect/describe the measurement of the variable. With 18 indicators of Transformational Leadership, Employee Creativity, and Innovative Climate > 0.07, according to Rule of Thumb, Hair et al (2021), Henseler et al (2009) using $OL \geq 0.70$ is acceptable, then another opinion according to Chin (2021). 1998), an OL value ≥ 0.60 is acceptable. The example in this paper refers to Hair et al (2021) where $OL \geq 0.70$.

Composite reliability (CR)

Composite reliability (CR) is a measure to show how reliable the variable is. According to Hair et al (2011), Henseler (2009), the minimum Composite Reliability value is 0.70, however in Hair et al (2019) for an exploratory study the Composite Reliability value was between 0.60 – 0.70. So with a Transformational Leadership score of $0.920 > 0.70$, employee Creativity of $0.929 > 0.70$, and an Innovative Climate of $0.901 > 0.70$, it can be accepted.

Cronbach's Alpha

Cronbach's Alpha and Rho A. In Hair et al (2019), Cronbach's Value's alpha will give a lower/too conservative reliability value while the Composite Reliability value is considered too high. Cronbach's Alpha with the variables Transformational Leadership $0.901 > 0.70$, Employee Creativity $0.905 > 0.70$, and Innovative Climate $0.862 > 0.70$, it can be declared Acceptable.

Average variance extracted (AVE)

Average variance extracted (AVE) is the average variation of each measurement item contained by the variable. How far as a whole the variable can explain variations in measurement items. This measure also describes how good the convergent validity of the variable is. According to Hair et al (2021), the value (AVE) ≥ 0.50 . with the variables Transformational Leadership $0.590 > 0.50$, Employee Creativity $0.726 > 0.50$, and Innovative Climate $0.646 > 0.50$, it can be declared Acceptable.

Inner Model Research Results

In this research, the relationship between variables will be explained based on the values obtained from the path coefficient. These values can be seen in the image below:

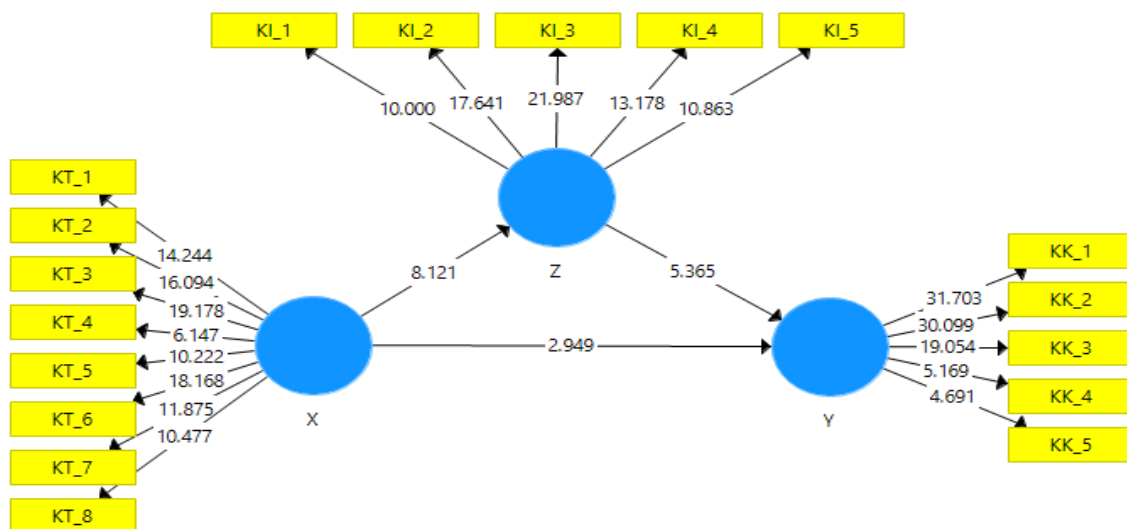


Figure 3. Inner Model or Structural Model

Path coefficient evaluation is used to show how strong the effect or influence of the independent variable is on the dependent variable. Based on the inner model shown in Figure 3 above, it can be explained that the largest path coefficient value is shown in the influence of Transformational Leadership on the Innovative Climate of 8.212. Then the second biggest influence is the influence of the Innovative Climate on Employee Creativity of 5.365 and the biggest influence small shown by the influence of Transformational Leadership on Employee Creativity of 2.949.

Table 2. Evaluation of the Structural Model/Inner model

Latent Variables	Indicators	VIF	Determination Coefficient (R2)	Cross-Validated Redundancy(Q2)
Transformational Leadership (X)	KT_1 KT_2	2,809	0.632	0.413
	KT_3 KT_4	2,718		
	KT_5 KT_6	2,426		
	KT_7 KT_8	1,963		
		2,306		
		2,835		
		2,322		
		2,173		
Employee Creativity (Y)	KK_1 KK_2	3,521	0.632	0.413
	KK_3 KK_4	4,080		
	KK_5	3,630		
		2,584		
Innovative Climate (Z)		2,349	0.400	0.236
	KI_1	2,181		
	KI_2	2,437		
	KI_3	2,113		
	KI_4	2,022		
	KI_5	1,567		

R-Square

Based on the data presented in table 2, it can be seen that the R-Square value for Innovative Climate is 0.400, which means that the Transformational Leadership variable influences the Innovative Climate variable in the weak category. Meanwhile, for the Employee Creativity variable, the R-Square value is 0.632, which means that the Transformational Leadership variable influences the Employee Creativity variable in the strong category. Based on the R-Square value, it can be said that employee creativity is influenced by independent variables and mediating (intervening) variables by 63.2%, while 36.8% is influenced by other variables outside the variables studied by the researcher.

Q-Square

Next, the Q Square value is used to measure how good the observation values produced by the model are and also the parameter estimates. If the prediction is relevant. So based on the calculation above, the prediction Relevance (Q-Square) value is more than 0 (zero), namely 0.236, meaning it has a relevant prediction.

F-Square

The interpretation of the F2 effect size value in Hair et al (2021) and Henseler (2009) is 0.02 (low) 0.15 (medium) 0.35 (large). The f square formula is as follows. The F square value for the moderation test should be used recommendations from Kenny (1998) in Hair et al (2021) namely 0.005 (low) 0.015 (medium) 0.025 (large).

Table 3. F-Square (F2)

	Transformational Leadership (X)	Employee Creativity (Y)	Innovative Climate (Z)
Transformational Leadership (X)		0.147	0.666
Employee Creativity (Y)			
Innovative Climate (Z)		0.530	

The direct effect of Transformational Leadership > Employee Creativity is 0.147 (large), Transformational Leadership > Innovative Climate is 0.666 (large), and Innovative Climate > Employee Creativity is 0.530 (large).

VIF (variance inflation factor)

For a VIF (variance inflation factor) value above 5, it indicates the possibility of a collinearity problem among the predictor constructs, so based on table 4.8, the VIF values are all below 3. It can be concluded that there is no collinearity problem between the predictor constructs (problems encountered when estimating regression model coefficients linear).

SRMR is Standardized Root Mean Square Residual

SRMR is standardized root mean square residual, which is a measure of model fit, namely the difference between the data correlation matrix and the estimated model correlation matrix.

Table 4. Standardized Root Mean square Residual (SRMR)

	Saturated Model	Estimated Model
MR	0.098	0.098

Rule of thumb SRMR values below 0.08 indicate a fit model. However, another opinion, namely Karin Schermelleh et al (2003) states that SRMR less than 0.10 is still acceptable fit. Judging from the estimated model value of 0.098, it is still not suitable.

PLS Predict

To show that the PLS results have a good measure of predictive power, it is necessary to compare them with the basic/naive model, namely the linear regression model (LM). The model comparison (PLS versus LM) is said to be better in terms of the RMSE (Root mean squared error) or MAE (mean absolute error) and Q square predictive measurements: (a) If the results of the analysis show that the PLS model has higher RMSE or MAE values for all indicators/items measuring endogenous variables than the LM model, this indicates that the PLS SEM model does not have predictive power (poor/low predictive power); (b) If most of the indicators/items measuring endogenous variables in the PLS model have lower RMSE or MAE values than the results of the LM model, then the PLS model has medium predictive power; and (c) If all indicators/items measuring

endogenous variables in the PLS model have lower RMSE or MAE values than the results of the LM model, then the PLS model has high predictive power.

Table 5. PLS Analysis VS LM Analysis

Items	PLS model			LM models		
	$Q^2_Predict$	RMSE	MAE	$Q^2_Predict$	RMSE	MAE
KK_1	0.476	0.467	0.332	0.328	0.528	0.383
KK_2	0.394	0.539	0.396	0.188	0.624	0.460
KK_3	0.391	0.496	0.341	0.248	0.551	0.385
KK_4	0.017	0.685	0.461	0.088	0.721	0.467
KK_5	-0.003	0.647	0.444	0.094	0.676	0.437
KI_1	0.100	0.720	0.533	0.045	0.775	0.553
KI_2	0.182	0.586	0.413	-0.000	0.648	0.464
KI_3	0.261	0.810	0.617	0.194	0.845	0.643
KI_4	0.259	0.637	0.440	0.079	0.710	0.498
KI_5	0.296	0.628	0.471	0.244	0.651	0.529

Here it can be seen that most of the indicators/items measuring endogenous variables in the PLS model have higher $Q^2_Predict$ values, but the RMSE or MAE is lower than the results of the LM model, so the PLS model has medium predictive power Q^2 .

Hypothesis testing

Based on the data processing that has been carried out, the results can be used to answer the hypothesis in this research. Hypothesis testing in this research was carried out by looking at the T-Statistics and P-Value values. The research hypothesis can be declared accepted if the P-Value value is ≤ 0.05 . The following are the results of hypothesis testing obtained in this research in table 4.9 SmartPLS output, which is as follows:

Table 6. Path Corficient and Specific indirect effect

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O / STDEEV)	P Values	Results
Transformational Leadership - > Employee Creativity	0.300	0.317	0.102	2,949	0.003	Accepted
Transformational Leadership -> Innovative Climate	0.632	0.641	0.078	8,121	0,000	Accepted
Innovative Climate -> Employee Creativity	0.570	0.556	0.106	5,365	0,000	Accepted
Transformational Leadership -> Innovative Climate - >Employee Creativity	0.360	0.360	0.091	3,946	0,000	Accepted

From this data, the results can be seen through testing using the T-statistic as follows:
The significance level is 0.05 and degrees of freedom with the following conditions:

$Df = nk - 1$

$Df = 71 - 3 - 1 = 67$

From these provisions, the number = 1.677 is obtained T_{tabel}

Hypothesis 1

This first test was carried out to see whether Transformational Leadership had a significant effect on Employee Creativity. The research results in table 6 above show that the original sample value for Transformational Leadership -> Employee Creativity is 0.300. with a significance of 5% as shown by a statistical T value of $2.949 > 1.677$ and a P value of $0.003 < 0.05$. So it is stated that Transformational Leadership has a positive and significant effect on Employee Creativity.

Based on these results, it can be concluded that hypothesis H1 is accepted

Hypothesis 2

This second test was carried out to see whether Transformational Leadership had a significant effect on the Innovative Climate. The research results in table 6 above, the original sample value for Transformational Leadership -> Innovative Climate is. 0.632 with a significance of 5% as indicated by a T-Statistics value of $8.121 > 1.677$ and a P Value of $0.000 < 0.05$. So it is stated that Transformational Leadership has a positive and significant effect on the Innovative Climate.

Based on these results, it can be concluded that hypothesis H2 is accepted

Hypothesis 3

This second test was carried out to see whether the Innovative Climate had a significant effect on Employee Creativity. The research results in table 6 above, the original sample value of Innovative Climate -> Employee Creativity is 0.570 with a significance of 5% as indicated by the T-Statistics value of $0.5.365 > 1.677$ and P Value of $0.000 < 0.05$. So it is stated that the Innovative Climate has a positive and significant effect on Employee Creativity.

Based on these results, it can be concluded that hypothesis H3 is accepted

Hypothesis 4

In the fourth tester it was shown to simultaneously see the influence of Transformational Leadership on Organizational Commitment through Job Satisfaction as a mediating variable. Based on table 6, it can be seen that the Specific Indirect Effect of Transformational Leadership -> Innovative Climate, the original sample value is 0.360 and the T-Statistics value is $3.946 > 1.677$ and the P Value is $0.000 < 0.05$. So it is stated that Transformational Leadership has a Positive and Significant Influence on Employee Creativity through an Innovative Climate as an Intervening Variable.

Based on these results, it can be concluded that hypothesis H4 is accepted

CONCLUSION

After conducting an analysis of the influence of Transformational Leadership on Employee Creativity through Innovative Climate as an Intervening variable for Palangka City Rattan Craftsmen MSME employees. Therefore the author concludes that: (1) Transformational Leadership has a positive and significant effect on Employee Creativity in Palangka Raya City Rattan Craftsmen MSMEs; (2) Transformational Leadership has a positive and significant effect on the Innovative Climate of Palangka Raya City Rattan Craftsmen MSME employees; (3) The Innovative Climate has a positive and significant effect on Employee Creativity among MSME employees of Palangka Raya City Rattan Craftsmen; and (4) Transformational Leadership has a positive and significant effect on Employee

Creativity through Job Satisfaction among MSME employees of Rattan craftsmen in Palangka Raya City.

Based on the results of the research that has been carried out, the researcher provides suggestions for MSME Rattan craftsmen in Palangka Raya City, as follows: (1) It is recommended that the leadership of Palangka Raya City Rattan craftsmen MSMEs should be able to hold discussions to stimulate new ideas, then provide recognition and appreciation for creative contributions. And leaders can also model creative thinking and innovation as leaders, and ensure employees have the resources they need to realize their ideas; (2) It is hoped that the Management will provide ongoing training programs at basic, middle and upper levels for their employees. This aims to ensure that employees can master and pursue their field of work; (3) Leaders and employees are increasing support for ideas in rattan craftsmen MSMEs in Palangka Raya by encouraging collaboration between entrepreneurs to exchange ideas; and (4) Future researchers are expected to look for other variables that may also influence employee creativity apart from the variables that have been studied in this research, for example Addictive Leadership, Reward Systems, Work Culture and others so that it is hoped that the research will be more optimal.

In this research, the author has tried to comply with scientific procedures, however of course it still has limitations, namely: (1) This research was only carried out at 6 Rattan craftsmen MSMEs in Palangka Raya City which only had a population of 71 respondents and used a saturated sampling technique so it may not be able to represent the research results; (2) The R square (R^2) value from this study was 63.2%. It is hoped that future researchers will be able to add existing variables to other independent variables; and (3) There are many factors that influence employee creativity, but researchers only took 2 factors, namely Transformational Leadership and Innovative Climate.

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