

# Implementation of Knowledge Management On Organizational Performance Through Innovation (Case Study on Digital Creative MSME in Semarang, Indonesia)

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**Abstract** Ministry of Communication and Information Technology is creating and developing new program is called A Movement of 1000 Digital Start-ups in Indonesia. Semarang, as one of capital cities in Indonesia is also developing its digital creative industry. To develop it, government of Semarang city needs valid data about innovations and performances in digital creative industry. To create innovation and develop it, one of the ways is to implementing knowledge management, its stages form knowledge creation, knowledge sharing, and knowledge implementing. This research aims to understand how knowledge management implementation influencing organizational performance through innovation in digital creative industries in Semarang partially and simultaneously. The data is collected by giving questionnaire to the leaders of MSME, which is 33 respondents, determined by total sampling technique because MSME of digital creative industry in Semarang is having a very little amount. The result of this research is implementation of knowledge management is influencing innovation in large amount, but in organizational performance, it is influencing in few amount. Besides, innovation is not influencing organizational performance, therefore with innovation as intervening variable cause there is no influence of knowledge management implementation on organizational performance in Semarang, it is because digital creative industries in Semarang city is still yet mature and still have a priority in innovation, but they don't have long term goals to develop their organizational performance.

**Keywords;** *Knowledge Management Implementation; Innovation; Organizational Performance.*

## I. INTRODUCTION

Business fields in the digital creative industry include: Website Development (Multimedia & Animation), Interactive Desktop Multimedia & Games, Interactive Mobile Multimedia & Games (Android, Symbian, BB-OS, I-OS Based), Multimedia company profile production, Event documentation (video, Photo), and Multimedia Broadcasting. In the city of Semarang itself, the creative industry is still just driven by the

government. The lack of optimal strengthening of the creative industry by the government has led to the absence of accurate data on the number of creative industries, especially in the digital field, and the performance of business organizations in the form of sales results. Based on the results of interviews with Semarang Telematics Creation and Innovation Incubator, the accuracy of the data regarding the number and performance of organizations is still ambiguous. Then, based on the results of the interview, it was explained that many digital creative industries have not yet maximized the implementation of the company's internal knowledge management so that innovation and performance of the company is still not widely available. Most digital creative industries only make products, even though in the company they already have the capital to implement knowledge management, and their innovation is greatly influenced by the results of knowledge management in the company. Another problem, many digital creative industries in the city of Semarang are many that are not sustainable, because the digital creative market in the city of Semarang still tends to be a little. Moreover, plus all this time the development of SMEs in Indonesia is often done with a "gebyah uyah" (one size fits all) approach. This means that the training done does not differentiate its specific needs. Though knowledge, ideas and innovation are the lives of SMEs engaged in the digital creative field.

## II. THEORETICAL ROOTS

### Knowledge Creation

Knowledge creation is a process of synthesis through organizations that interact with the individuals and the environment to overcome the contradiction the Organization faces that appear. This is an interconnection between agency and structure that makes the process of knowledge occurs, as a dynamic interaction between the individual levels of the link to the community. [1]

### Knowledge Sharing

A process in which individuals are mutually exchanged thoughts on knowledge possessed (tacit and explicit) and jointly create new knowledge [2]

### Knowledge Implementing

Knowledge created through a process that is interconnected and integrated into parts of the organization into knowledge will then be implemented in the organization. [3]

### Innovation

Innovation as the process to make changes, large and small, sudden and gradual, little by little, to produce, process, and the result will serve to introduce something new to the Organization and will add value for customers and contributing to add new knowledge in the organization. [4]

### Organizational Performance

Organizational performance is the totality of the work that is within an organization to achieve the objectives of the organization means that an organization's performance, it can be seen from the level of the extent to which the organization can achieve goals that are based on the purpose for which It has been set previously.

### Indicator of Variables

In this study using several indicators for each variable. In knowledge creation variables, the indicators are (a) socialization, (b) externalization, (c) combination and (d) internalization. In knowledge sharing variables, the indicators are (a) comparison, (b) consequences, (c) connections and (d) conversations. Then the knowledge implementing variables, indicators (a) patent, license technology, (b) knowledge based customer service, (c) knowledge products and embedded technology, (d) separate KBS application products and (e) knowledge workers at all levels. In the innovation variable, (a) process innovation, (b) product innovation and (c) administrative innovation. The last is on organizational performance variables, variables (a) financial perspective, (b) internal perspective, (c) customer perspective and (d) innovation and learning perspective.

## III. METHODOLOGY

The type of research used in this study is a type of explanatory research. The population in this study are all business organizations or MSMEs in the digital creative industry in the city of Semarang, amounting to 33 UMKM digital creative industries in the fields of multimedia, comics, animation, information technology, software, games, graphic design and digital agencies. Because the number of objects is relatively small, the sampling is done by the technique of "saturated sampling / census technique", in which all organizations are subjected to sampling. Data collection techniques used in this study are literature studies and observations and interviews with IKITAS startups and MSMEs in the digital creative industry in the city of Semarang. Observations and interviews were conducted to obtain valid data. Data analysis used multiple linear regression, t test, F test, multiple method and path analysis (path analysis) which were calculated and measured through the SPSS version 16.0 application.

## IV. RESULT & EXPLANATION

### Coefficients<sup>a</sup>

Model		Unstandardize d Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.750	3.934		-.953	.348
	X1	.355	.129	.399	2.752	.010
	X2	.427	.219	.354	1.952	.061
	X3	.169	.189	.157	.893	.379
a. Dependent Variable: Z						

Based on the table above, it can be seen that regression coefficients for knowledge creation are 0.355, knowledge sharing variables are 0.427 and knowledge implementing variables are 0.169. The constant value is -3.750. Then the multiple linear regression equation formed is  $Z = -3,750 + 0,355X1 + 0,427X2 + 0,169X3$ . The hypothesis which reads "there is a positive influence between knowledge creation (X1), knowledge sharing (X2) and knowledge implementing (X3) simultaneously on innovation (Z)", as evidenced by the results of multiple linear regression test with the equation  $Z = -3,750 + 0,355X1 + 0,427X2 + 0,169X3$  with t count knowledge creation (X1) variable 2,752 bigger than t table that is 1,69552, knowledge sharing variable (X2) equal to 1,952 bigger than 1,69552 t table and knowledge implementing variable (X3) is 0.893 smaller than t table which is 1.69552. It can be said that only knowledge implementing variables have no effect on innovation. The positive regression coefficient of each of the knowledge creation variables is 0.355, knowledge sharing variable is 0.427 and knowledge implementing variable is 0.169. In the F test, the calculated F which is 17.214 is greater than the F table of 2.92, so that the variables of knowledge creation (X1), knowledge sharing (X2) and knowledge implementing (X3) simultaneously have a positive effect on the innovation variable (Z). This is consistent with the theory of Stankevica and Slaustaitė (2012) which shows that the existence of knowledge management implementation processes can create and even increase the innovation of an organization.

Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.
1	(Constant)	39.961		4.506	.000
	X1	.192	.158	.660	.514
	X2	.056	.034	.113	.911
	X3	-.125	-.085	-.293	.771
a. Dependent Variable: Y					

Based on the table above, it can be seen that regression coefficients for knowledge creation are 0.192, knowledge sharing variables are 0.056 and knowledge implementing variables are -0.125. The constant value is 39,961. Then the multiple linear regression equation formed is  $Y = 39,961 + 0,192X1 + 0,056X2 - 0,125X3$ .

In the hypothesis which reads "there is a positive influence between knowledge creation (X1), knowledge sharing (X2) and knowledge implementing (X3) on organizational performance (Y) through innovation (Z)", it is not proven by the results of multiple linear regression test with equation  $Y = 38,344 + 0,345X1 + 0,240X2 - 0,052X3 - 0,431Z$  with the t count knowledge creation (X1) variable is 1,058, knowledge sharing variable (X2) is 0,458, knowledge implementing variable (X3) is -0,121 and innovation variable (Z) equal to -1,031 while t table is 1,69552. In the variable knowledge creation, knowledge sharing, knowledge implementing, and innovation, t counts smaller than t table. This shows that knowledge creation, knowledge sharing, knowledge implementing, and innovation have no effect on organizational performance. Simultaneously, it will be seen from the F test that the calculated F is 0.412 smaller than F table of 2.92, so that it can be concluded, simultaneously knowledge creation, knowledge sharing, knowledge implementing, and innovation have no effect on organizational performance.

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	187.614	3	62.538	17.214	.000 <sup>a</sup>
	Residual	105.356	29	3.633		
	Total	292.970	32			
a. Predictors: (Constant), X3, X1, X2						
b. Dependent Variable: Z						

Based on the table, obtained F count > F table (17,214 > 2,92) and significance value (0,000 < 0,05). So it can be concluded that the variables of knowledge creation, knowledge sharing and knowledge implementing jointly influence and are significant to innovation.

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.813	3	3.604	.195	.899 <sup>a</sup>
	Residual	535.429	29	18.463		
	Total	546.242	32			
a. Predictors: (Constant), X3, X1, X2						
b. Dependent Variable: Y						

Based on the table, obtained F count > F table (0.195 < 2.92) and significance value (0.899 > 0.05). So it can be concluded that the variables of knowledge creation, knowledge sharing and knowledge implementing together do not affect organizational performance.

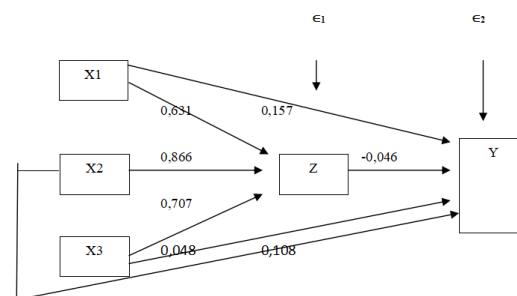


Fig. 1. Path Analysis

The structural equation can be seen as follows:  
 $Z = 0.631X1 + 0.866X2 + 0.707X3 + 1$   
 $Y = 0,157X1 + 0,108X2 + 0,048X3 + (-0,046) Z + 2$   
 The direct influence of knowledge creation (X1) variables on organizational performance (Y) is 0.157 while the indirect effect is -0.029. From these results it can be seen that the direct influence of knowledge creation (X1) on organizational performance (Y) is greater than the indirect effect. The direct influence of knowledge sharing variables (X2) on organizational performance (Y) is 0.108 while the indirect effect is -0.04. From these results it can be seen that the direct effect of knowledge sharing (X2) on organizational performance (Y) is greater than its indirect influence. The direct effect of knowledge implementing variable (X3) on

organizational performance (Y) is 0.048 while the indirect effect is -0.033. From these results it can be seen that the direct effect of knowledge implementing (X3) on organizational performance (Y) is greater than the indirect effect.

The results of path analysis state that the effect of knowledge creation (X1), knowledge sharing (X2) and knowledge implementing (X3) on organizational performance (Y) through innovation (Z) is -1.031 smaller than t table, which is 1.69552 with a significance of  $0.311 > 0.05$  so that it is not significant. Thus it was concluded that innovation (Z) did not mediate the relationship between the implementation of knowledge management (X) and organizational performance (Y). The hypothesis "innovation that has no effect on organizational performance", so that by using calculation of path analysis, knowledge creation, knowledge sharing and knowledge implementation does not affect organizational performance through innovation. Then, it can be explained also from the sobel test where t counts from each variable smaller than t table which is 1.69552. In fact, in a study conducted by the Conference Board in 2000 in 150 companies in North America and Europe, without innovation, organizational performance was very difficult to increase, while to create innovation, the implementation of knowledge management was needed so that the ideas that made innovation finally emerged. will improve organizational performance. Based on the results of research in the field, the implementation of digital creative industry knowledge management in the city of Semarang can increase innovation, but cannot improve organizational performance. This is because the orientation of the digital creative industry in the city of Semarang is focused on creating product innovations which are short-term goals, but not yet focused on improving organizational performance which is a long-term goal. Another thing is due to the climate of the digital creative industry in the city of Semarang, which is in its early stages, so that it is still thinking about how the digital creative industry is built to be known first. The average age of a digital creative industry organization in the city of Semarang is relatively short or relatively young, this is what causes organizations to still not think about improving organizational performance. Another thing that influences is because the innovation process cannot quickly affect organizational performance. Longitudinal data is needed to see the innovation process that can affect organizational performance.

## V. CONCLUSION

Based on the results of the research analysis, it can be concluded that, implementation of knowledge management has positive effect to innovation, also has positive effect to organizational performance. However, using innovation as intervening variable, implementation of knowledge management has no positive effect to organizational performance. It is because the orientation of the MSME's itself, and the climate of digital creative industry in Semarang.

This problem can be fixed by some action from many party, such as leaders from the organization should support the development of employee performance, business organizations in the field of digital creative industries are better to set long-term goals, namely to improve organizational performance so that organizations can survive for a long time, not only to increase innovation. In developing the performance of business organizations in the creative industry sector, support from a strong government is needed, because government support can help develop the performance of the industry organization.

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