

# Effect of knowledge management on organizational performance of Central Statistics Agency (BPS) of Cilacap Regency

**Muhammad Aldi<sup>1\*</sup>, Linda Perdana Wanti<sup>2</sup>**

<sup>1\*,2</sup> Politeknik Negeri Cilacap, Central Java, Indonesia

Email: <sup>1\*</sup>indomietel.or.stu@pnc.ac.id, <sup>2</sup>linda\_perdana@pnc.ac.id

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## ARTICLE INFO

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## ABSTRACT

The research objective is to analyze the effect of knowledge management on organizational performance. The research method uses descriptive quantitative methods, using questionnaires as the primary data collection tool. Many data analysis techniques use linear regression analysis. The results of this study indicate a significant positive relationship between knowledge management and organizational performance at BPS Cilacap Regency. It is proof that the implementation of knowledge management practices in the organization contributes significantly to the improvement of performance. The results of the analysis also show that aspects of knowledge management as structured knowledge, knowledge sharing, and the use of information technology have a positive impact on organizational performance.

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## INTRODUCTION

In today's rapidly changing and highly competitive business, organizations are searching for ways to improve performance and maintain a sustainable advantage in today's rapidly evolving and highly competitive environment. As a result, knowledge management has emerged as a critical success factor for organizations. Knowledge management encompasses a wide range of activities aimed at capturing, organizing, storing, and sharing knowledge within organizations (Abualoush, Masa'deh, Bataineh, & Alrowwad, 2018). By using knowledge management (KM) effectively, organizations can optimize their resources, improve efficiency, drive innovation, and gain competitiveness (Ghani Al-Saffar & Obeidat, 2020).

Knowledge management (KM) is the process of connecting, storing, organising, managing, and using knowledge to improve organizational performance (Girard, Georgia, & College, 2022). In today's highly competitive environment, organizations are increasingly relying on KM practices to gain a competitive advantage over their rivals (Anwar & Abdullah, 2021). The Central Bureau of Statistics (BPS) of Cilacap Regency is one organization that has recognized the importance of KM in improving its performance (Wijaya & Hong, 2018). This journal will analyze the effect of knowledge management on organizational performance at Central Statistics Agency of Cilacap Regency. This research will explore how the implementation of effective KM practices can lead to improved decision-making, increased innovation, and increased productivity in organizations. The purpose of this research is to investigate the effect of knowledge management implementation on the organizational performance of BPS Cilacap Regency.

The Central Bureau of Statistics (BPS) of Cilacap Regency plays an important role in collecting, analyzing, and disseminating statistical data for policy formulation, economic development, and community welfare in the region (Ardiansyah, Brilian Putra, Wicaksono,

Inayah, & Perpajakan, 2023). As a government institution responsible for producing reliable and accurate data, BPS faces the challenge of managing large amounts of information while ensuring its accessibility, accuracy, and relevance to support evidence-based decision-making.

In recent years, BPS has faced several challenges in fulfilling its mission due to limited resources and staff expertise. To overcome these challenges, BPS Cilacap Regency needs to adopt innovative approaches such as Knowledge Management (KM). KM involves identifying critical areas of knowledge within the organization and developing strategies to capture this knowledge so that it can be shared effectively across departments or divisions (Ferreira, Mueller, & Papa, 2020). This approach aims to improve organizational learning processes by enabling people from different functional areas to share experiences more easily.

This study aims to investigate the impact of knowledge management implementation on the organizational performance of BPS Cilacap Regency, with specific objectives outlined as follows. Firstly, the study endeavors to analyze existing knowledge management practices within BPS Cilacap Regency, assessing processes, strategies, and tools employed for knowledge asset management. This includes an evaluation of the effectiveness of knowledge creation, acquisition, dissemination, and utilization within the organization. Secondly, the research aims to evaluate BPS organizational and performance indicators, encompassing data accuracy, timeliness, and efficiency. Key performance indicators (KPIs) relevant to BPS, such as data accuracy, timeliness of data collection and reporting, and efficiency in data processing, will be measured and assessed. Thirdly, the study seeks to examine the relationship between knowledge management practices and organizational performance indicators, analyzing how effective knowledge management contributes to improved data accuracy, timeliness, efficiency, and overall BPS performance. Additionally, the research aims to identify potential barriers and challenges faced by BPS in implementing effective knowledge management strategies, with the goal of proposing recommendations and strategies to overcome these obstacles and enhance knowledge management effectiveness. Finally, the study aims to provide practical recommendations and strategies for improving knowledge management and enhancing organizational performance within BPS, offering insights applicable to similar organizations in optimizing knowledge management processes to achieve strategic goals.

## **METHOD**

The research method used for this study is descriptive-quantitative (Nassaji, 2019). Based on survey questionnaires distributed among employees working in different departments/units within BPS Cilacap Regency who have experience implementing or benefitting from KM practices. Sampler size was determined using the Krejcie and Morgan formula, which estimates the sample size based on population size and margin of error (Godden, 2004). The quantitative methodology employed in this study aims to provide statistical evidence and objective insights into the relationship between knowledge management practices and organizational performance indicators. It involves the selection of a representative sample of BPS employees, data collection through structured surveys, and rigorous statistical analysis using appropriate techniques such as correlation analysis and regression analysis. This research also uses validity and reliability tests (Gowda et al., 2019). Validity is an index that shows that a measuring instrument truly measures what it intends to measure (Surucu & Maslakci, 2020). The higher the validity, the more accurate it will be. Meanwhile, the reliability test in this study is used to determine whether a questionnaire used to collect research data can be considered reliable. The analysis of data used in this study is multiple linear regression analysis. A multiple linear analysis test is one independent variable with many dependent variables (Ottaviani & Marco, 2021). Data Analysis is using IBM SPSS Statistics Version 25.0.

## **RESULTS AND DISCUSSION**

This study involved 30 employees and was given 15 question items related to the research variables. In conducting research, the validity test uses the Pearson product-moment correlation method with a confidence level of 0.05 if the value of the correlation score is greater

r on the table, then the statement tested is valid. The r table used is 0.361 because the number of respondents is 30 employees, in this study. The results of the validity tests are shown in Table 1.

**Table 1**  
**Validity Test Results**

Variabel	Correlation		Desc
	score	r	
Knowledge Management (X1)	0.742	0.361	Valid
	0.635	0.361	Valid
	0.729	0.361	Valid
	0.452	0.361	Valid
	0.670	0.361	Valid
Skills (X2)	0.643	0.361	Valid
	0.768	0.361	Valid
	0.670	0.361	Valid
	0.671	0.361	Valid
	0.712	0.361	Valid
Organisational Performance (Y1)	0.719	0.361	Valid
	0.617	0.361	Valid
	0.711	0.361	Valid
	0.460	0.361	Valid
	0.637	0.361	Valid

From Table 1, it can be seen that all the items have a coefficient value greater than Table r. In summary, it can be said that the data collection tools used in this research is valid, so that the research can proceed to the next stage, namely reliability testing.

The reliability test for this study is tested using Cronbach's alpha technique, in which a statement is considered reliable if the calculated Cronbach's alpha value is greater than 0.60. The results of the reliability test are shown in Table 2.

**Table 2**  
**Reliability Test Results**

Variabel	Cronbach Alpha
Knowledge Manajemen (X1)	0,647
Skills (X2)	0,729
Organisational Performance (Y1)	0,712

Table 2 shows that all question items produce alpha coefficients greater than 0.60. So that it can be summarized that all items of the data collection questionnaire used in this research are reliable, so the questionnaire is declared logical and feasible as a statement item to measure each indicator and regression analysis.

The next step is the regression analysis testing. The goal is to be able to calculate the independent variables on organizational performance. If the Sig value is less than 0.05 or if the t-count is greater than the t-table (2.052), then there is an influence of variable X on variable Y. The results of the calculation with the IBM SPSS program version 25. The results are presented in Table 3.

**Table 3**  
**Results The Regression Analysis Testing using IBM SPSS Version 25.**

<b>Coefficients<sup>a</sup></b>					
<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>		<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	
1 (Constant)	5,982	3,263		3,833	0,008
X1	,709	,134	,730	5,287	0,000
X2	,016	,142	,015	2,111	0,003

a. Dependent Variable: Y1

Based on Table 3, we will do testing to find out if the variables X1 and X2 partially affect variable Y. After that, regression testing is continued to find out the relationship between the independent variable and the dependent variable, whether the value is positive or negative. To test the research hypothesis, first, we must know about the basis for decision-making in the Partial t-test. In this regard, two references can be used as a basis for decision-making. Firstly, by looking at the significance value of Sig. And secondly, by comparing the value of the t count with the t table (2.052). If the value of significance (Sig) has a probability smaller than 0.05, then there is an influence of the independent variable (X) on a dependent variable (Y), or the hypothesis is accepted. The partial test results can be seen in Table 4.

**Table 4**  
**Results of Partial Variable Testing**

<b>Coefficients<sup>a</sup></b>					
<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>		<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	
1 (Constant)	5,982	3,263		1,833	0,008
X1	,709	,134	,730	5,287	0,000
X2	,016	,142	,015	2,111	0,003

a. Dependent Variable: Y1

Based on Table 4 above, it can be seen that the Sig. value for the effect of variable X1 on variable Y is 0.00 smaller than 0.05, and the t-count value of 5.287 is greater than the t-table (2.052). Based on this, it can be summarized that knowledge management has a significant effect on organizational performance. Then, in the second test, the regression test also shows the effect of skills (X2) on organizational performance (Y1). The significant value of the results of the skills (X2) table is 0.003 with a value of significance level of 0.05 in the coefficients table, and the t-test gives a figure of 0.003 with a t-table (2.052). So, it can be summarized that skills have an effect on employee performance.

So the next step is the f-test, which is to determine the effect simultaneously of the dependent variable Y. These tests are carried out to see the effect of all independent variables on the dependent variable. The standard used is 0.05. If the F significance value is less than 0.05, it is understood that the independent variable has an effect on the dependent variable simultaneously or vice versa. The F test results can be seen in Table 5.

**Table 5**  
**F Test Results**

<b>ANOVA<sup>a</sup></b>						
<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	102,184	2	51,092	14,997	.000 <sup>b</sup>
	Residual	91,982	27	3,407		
	Total	194,167	29			

a. Dependent Variable: Y1

b. Predictors: (Constant), X2, X1

From Table 5 given above, a significance value is 0.000. Because the significance value of 0.000 is less than 0.05, then under the decision-making basis in the F test, It can be concluded that the hypothesis is accepted. In addition, both the X1 and X2 variables have a simultaneous effect on the Y variable.

## CONCLUSION

These result obviously show the positive impact of knowledge management variables on organizational performance. Comprehensive hypothesis testing results, including simultaneous, partial, validity, and reliability testing, unequivocally prove that better knowledge and skills management significantly contribute to improved organizational performance.

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