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Enhancing Employee Performance Within the Digital Workplace is a Key Focus

Chandra Kurniawan Fu¹, Anoesyirwan Moeins², Alex Zami³

¹Universitas Persada Indonesia YAI, Indonesia, email: chandrakurniawanfu@upi-yai.ac.id

²Universitas Persada Indonesia YAI, Indonesia, email: anoesyirwanmoeins@upi-yai.ac.id

³Universitas Persada Indonesia YAI, Indonesia, email: alexzami@upi-yai.ac.id

Corresponding Author: chandrakurniawanfu@upi-yai.ac.id¹

Abstract: In order to understand the purpose of this study, we will examine the utilization of information and its application. The study conducted at the West Java Provincial Education Office focuses on the impact of technology competence on employee performance. It also investigates the effects of information technology application on employee performance. Both factors, technology competence and the application of information technology, are analyzed both together and separately. To conduct this study, we employed two research methods: descriptive survey and explanatory survey. Our research specifically targeted the employees of the Education Office in West Java Province, with a sample size of 50 individuals as our focus of analysis. Our investigation aimed to explore the cause-and-effect relationship, while our time frame was cross-sectional in nature. Upon analyzing the study's findings, it was determined that the employees at the West Java Provincial Education Office exhibited a satisfactory level of application of information technology. Furthermore, the competencies of these employees were considered appropriate and sufficient for meeting their job requirements. Additionally, their workplace performance was discovered to be exceptionally outstanding. Moreover, it was observed that the combined impact of Information and Competence Technology has a significant effect on employee performance at the West Java Provincial Education Office. However, it is important to note that when considering individual factors, the influence of Information Technology on employee performance surpasses that of competence. As the integration of Information Technology has emerged as a dominant force in driving productivity, it should be prioritized in the endeavor to improve employee performance. Therefore, it is recommended that the West Java Provincial Education Office implement a suitable Information Technology Application by enhancing the user-friendliness of other information technology resources, enabling employees to carry out their duties with a higher level of professionalism.

Keyword: Application of Information Technology, Competence, Employee Performance

INTRODUCTION

As the main tool, HR has a potential role in the organization that needs effective management and can be developed to support future organizations. On the contrary, it is worth noting that the pool of skilled employees within the organization is indeed constrained and dwindling. This can be attributed to various factors such as retirement, resignation, relocation, unfortunate demise, taking a sabbatical, or even termination of employment. Such occurrences are part of the natural course of events and necessitate proactive measures to be taken by the organization. So, in order to ensure the organization's performance stays on track, whenever there is a job opening, the people in charge of human resources need to find suitable replacements who have the necessary skills for the position. That's why HR planning, which includes recruitment, selection, employee placement, training and development, plays a crucial role in shaping the organization's future performance.

The issue that arises at the West Java Provincial Education Office revolves around employees lacking a clear understanding of the goals pertaining to employee growth. This is evident in the presence of staff members possessing inadequate educational qualifications and being assigned tasks that don't align with their expertise. Moreover, there exists an imbalance in the allocation and distribution of employees across different work units. Additionally, some employees fail to engage in initiatives aimed at enhancing their professional skills such as participation in education and training programs provided by the West Java Provincial Education Office. All these factors combined may potentially result in a decline in the number of high-performing personnel. The West Java Provincial Education Office has not utilized website media as a means to utilize information technology and update spatial information. Additionally, the role of human resources in the West Java Provincial Education Office has been unable to utilize information technology and update spatial information.

The lack of trained individuals in the field of information technology, who are capable of utilizing technological resources to enhance the quality of education, along with the absence of educational information that matches the current requirements, prevents the West Java Provincial Education Office from achieving global recognition. Furthermore, educational professionals also lack the necessary skills and knowledge to utilize spatial information technology effectively. Consequently, public awareness regarding the West Java Provincial Education is quite limited. These challenges highlight the importance of investing in human resources as they are considered invaluable assets for organizations. However, it is worth noting that employee performance still falls short of organizational targets and expectations, as displayed in Table 1 below.

Table 1 Employee performance within the provincial education office West Java January-March Period

No.	Variables	Target %	Current State %	Description
1.	Accuracy in completing work	90	60	Not achieved
2.	Quantity of work completed	85	65	Not achieved
3.	Work that refers to the plan	95	65	Not achieved

Source: West Java Provincial Education Office, 2019

According to Bernardin and Russel (2003:397), the performance of officers is influenced by their ability, effort put into the job, and the opportunities provided to them, which can be assessed by their job satisfaction. Some experts in HR management argue that high-quality HR possesses four key characteristics. First, they should have sufficient competency, including knowledge, skills, abilities, and experience. Second, they should demonstrate commitment to the organization. Third, they should consistently act in a cost-effective manner in all their activities. Finally, there should be congruence of goals, meaning that personal goals align harmoniously with organizational goals (Ruky, 2006: 56).

Due to a lack of competence in the field of information technology and a spirit of competing honestly and sportively, it is suspected that employee performance, as employees of the state civil apparatus, is less than optimal. The issues mentioned are still coupled with employees' incompetence in using information technology properly and the lack of necessary accessibility facilities for data input. In facing the Asean Economic Era, where bureaucratic services must be based on e-government, good management skills are needed and are also supported by a good management information system. From the entire explanation above, it is very clear that the management of the West Java Provincial Education Office can take the right actions and decisions in achieving organizational goals.

METHOD

The research that was carried out involved conducting a survey. This survey entailed selecting a group of individuals from a larger population and using a questionnaire as the primary means of gathering data. The purpose of this research was to gain a comprehensive understanding of information technology, proficiency, and productivity. Furthermore, it aimed to assess the impact of information technology and proficiency on employee performance by means of hypothesis testing. In this context, researchers employ two different types of studies, specifically descriptive and verification research. The purpose of this study is to examine the potential impact of information technology and competence on performance.

Considering the nature of this research, which aims to describe and verify through data collection in the field, the research methods employed are descriptive survey method and explanatory survey method. The investigation in this research focuses on causality, which entails establishing a causal relationship between the independent variable, information technology in this case, and work competence as the dependent variable, specifically performance. The primary focus of analysis in this study is the individual, as only employees serve as respondents. Moreover, the time horizon for this study is cross-sectional, meaning that information is gathered directly from a portion of the population (sample respondents) at a specific point in time to gain insights into their perspectives on the subject under scrutiny.

The data for this study is obtained from secondary sources such as documentation or reports that are accessible within the organization. Specifically, the performance evaluation of the West Java Provincial Education Office in 2019 serves as a valuable source. In addition to this, primary data regarding communication, competence, and employee performance is collected directly from the employees at the West Java Provincial Education Office, who act as respondents in this research. The individuals included in this research project were the employees working at the West Java Provincial Education Office, specifically a total of 138 individuals. To determine the size of the sample for this study, it was decided based on the statistical tests that will be conducted. The chosen statistical test is path analysis, which involves examining the path coefficient that essentially represents a correlation coefficient.

After conducting some initial research, I was able to obtain the parameter ρ . It's worth mentioning that there hasn't been any previous research done on this particular topic. Upon analyzing the data, I found that ρ , which represents the smallest correlation coefficient, is equal to 0.44. Now, considering that ρ is 0.44 and given that α is 0.05 and β is also 0.05, I need to perform some calculations in order to determine the sample size (n). After collecting data, the variables that have ordinal size are converted into interval form using the Method of Successive Intervals. Before distributing the instrument, its validity and reliability were tested using the Correlation Product Moment formula and the Cronbach's Alpha formula respectively, with the help of SPSS 11.5.

RESULTS AND DISCUSSION

Results

Implementation of Information Technology at the West Java Provincial Education Office

The application of information technology can support the improvement of the performance of employees at the West Java Provincial Education Office, but there are still those who are less concerned. Based on the results of the study, it was generally found that the application of information technology according to employees of the West Java Provincial Education Office is relatively quite appropriate.

Employee competence at the West Java Provincial Education Office

The employees at the West Java Provincial Education Office generally possess the necessary skills and abilities required for their tasks. However, there are certain areas that need to be addressed, particularly the lack of effective management and organization in completing work on time. Additionally, there is a deficiency in guiding and directing work partners, as well as in carrying out all managerial responsibilities. Although the overall competence of the employees is commendable, these indicators highlight the need for the institution to enhance employee competence through education and training. This will ultimately contribute to improved employee performance and success in the future.

Employee Performance at the West Java Provincial Education Office

The employees of the West Java Provincial Education Office have shown commendable performance. However, there are certain aspects that require attention. Some employees do not exert enough effort to enhance their performance beyond the prescribed standards. Their abilities still fall considerably below the expected level, and their workload remains below average compared to their colleagues. Consequently, it is imperative to augment performance by assessing the successful completion of tasks, fostering creativity and innovation to gain a competitive edge, and enhancing comparative skills. Additionally, it is vital for each employee to execute their assigned duties with proficiency and sincerity, taking into account their past experiences and the time available.

Effect of Information Technology Implementation and competence on employee performance at the West Java Provincial Education Office

In order to determine if the factors of Information Technology Implementation and competence have an impact on employee performance at the West Java Provincial Education Office, we conducted a study using path analysis. The software utilized for this analysis was SPSS release 12. To obtain the results, we first calculated the correlation between the variables, which can be seen in table 2 below.

Table 2. Correlation Matrix between Variables

	Performance	IT Implementation	Competence	
Pearson Correlation	Performance	1.000	.570	.580
	IT Implementation	.570	1.000	.440
	Competence	.580	.440	1.000
Sig. (1-tailed)	Performance	.	.000	.000
	IT Implementation	.000	.	.000
	Competence	.000	.000	.
N	Performance	50	50	50
	IT Implementation	50	50	50
	Competence	50	50	50

Source: SPSS output results

As shown in table 3 below, the overall effect of X1 to X2 and the path coefficient of other variables outside the variables X1 to X2 can be calculated based on the results of the correlation matrix calculation and the path coefficient calculation.

Table 3 Magnitude of Path Coefficient

Path coefficient of X1 on Y	pyx_1	0.570
Path coefficient of X2 on Y	pyx_2	0.580

Source: SPSS output results

The table 4 below displays the calculation results for various coefficients. These coefficients include the multiple determination coefficient ($R^2_{Y.X1, X2}$), the correlation coefficient ($R_{Y.X1, X2}$), the coefficient of determination of other variables on Y ($P^2_{Y\epsilon}$), and the path coefficient of other variables on Y ($P_{Y\epsilon}$).

Table 4. Multiple Determination Coefficient, and Path Coefficient of Other Variable

Multiple Determination (R^2)	$R^2_{Y.X1, X2}$	0.622
Multiple Correlation Coefficient	$R_{Y.X1, X2}$	0.723
Determination of Var. Other to Y	$P^2_{Y\epsilon}$	0.378
Path Coefficient X2 Var. Other to Y	$P_{Y\epsilon}$	0.440

Source: SPSS output results

The combined influence of variables X1 and X2 on variable Y is 0.622 or 62.2%, while the remaining 0.378 or 47.8% is influenced by other variables that were not considered in the study. We will test the overall hypothesis in the form of table 5 at the West Java Provincial Education Office.

Table 5. Simultaneous Test Results of X1 and X2 on Y

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	609.035	2	304.5189	25.704	.000 ^b
	Residuals	556.824	47	11.847		
	Total	1165.859	49			

a. Dependent Variable: Performance

b. Predictors: (Constant), Competence, IT Implementation

Source: SPSS 12.0 Output

Looking at the data in table 5, we can observe that the F count value is 25,704. Moreover, the sig. level of 0.00 is lower than the critical value of 0.05. Based on this information, we can confidently conclude that the simultaneous test results are indeed significant. As a result, it is justified to proceed with further analysis by conducting partial testing. The causal relationship or direct influence of X1 and X2 on Y can be observed in table 6 below, displaying the results.

Table 6 Influence of Variables X1 and X2 to Y and Influence Beyond Variables X1 and X2

Interpretation of Path Analysis		
Description	Influence	%
Effect of X1, X2 to Y	0.622	62.2
Influence Beyond X1, X2	0.378	37.8
Total		100

Source: Statistical Processing Results SPSS Program

Based on the findings of the test, it is evident that the utilization of Information Technology and proficiency have a substantial impact on employee performance at the West Java Provincial Education Office, accounting for 62.2% of the overall influence. The remaining 37.8% is attributed to other factors not taken into consideration by the author, such as work climate, motivation, commitment, leadership, work culture, and work environment. However, upon closer examination, it becomes apparent that the application of information technology plays a more significant role in shaping employee performance compared to competence. This conclusion is based on the results obtained through hypothesis testing, which allows us to construct a diagram depicting the causal relationship between variables X1, X2, and Y.

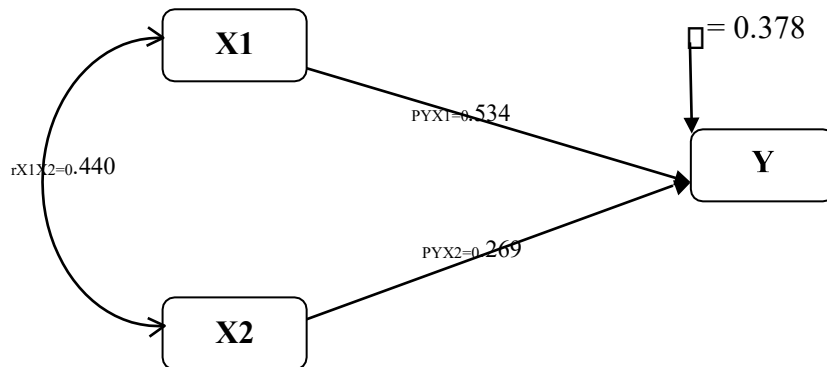


Figure 1: Causal Diagram Between Application of Information Technology (x1), Competence (x2) and Employee Performance (Y)

Shown in Table 7 below, the Application of Information Technology dominantly affects employee performance with a path coefficient of 0.534 and t count of 4.355 at a significance level of $\alpha (0.05) = 1.96$, while competence has an impact of 0.269 with a t count of 2.194 at the same significance level. It is evident from Figure 1 above that both variables play a role in influencing employee performance.

Table 7 Partial Path Coefficient Testing

Path	Coefficient	Symbol	T Count	T Table	Conclusion
PYX ₁	0.534		4.355	1.96	Ho reject There is an effect of Information Technology Implementation on employee performance
PYX ₂	0.269		2.194	1.96	Ho reject There is an influence of competence on employee performance

Source: calculation result

Table 8 below unveils the Application of Information Technology to employee performance at the West Java Provincial Education Office, based on the above calculations.

Table 8. Direct and Indirect Effects of Information Technology Implementation on Employee Performance

Interpretation of Path Analysis			
Desc		Influence	%
X1	Direct effect to Y	0.28516	38.5156
	Indirect effect through X2 to Y	0.08188	8.18782
Total		0.36703	46.7034

Source: Statistical Processing Results SPSS Program

It is evident from the given table that the direct contribution of the Application of Information Technology to employee performance was 38.5156% with a t count coefficient of 4.355, as well as indirectly through the competency variable of 8.18782%. This is due to the fact that the value of t count > t table at $\alpha (0.05) = 1.96$. Based on the findings, it can be inferred that Information Technology Implementation plays a substantial role in employee performance, accounting for 46.7034% of the overall impact. This empirical evidence suggests that enhancing the Application of Information Technology can directly enhance employee performance. Therefore, to boost employee productivity, it is crucial to focus on improving the Information Technology Implementation factor as it has a direct correlation with enhanced employee performance. The path coefficient reveals a positive and significant value, indicating that a higher quality Application of Information Technology leads to improved employee performance. It is evident that the utilization of Information Technology greatly impacts the productivity of employees, thus making its contribution quite significant. The findings demonstrate that, overall, the implementation of information technology has a noticeable effect on the performance of employees at the West Java Provincial Education Office. In this context, the office employs Information Technology based on the perspectives of its staff members, which can be categorized into two distinct forms: direct implementation and indirect implementation.

Based on the description provided, it is evident that the implementation of Information Technology has a significant impact on performance. This indicates that the utilization of Information Technology given to the employees of the West Java Provincial Education Office genuinely contributes to their well-being.

The effect of competence on the performance of employees of the West Java Provincial Education Office can be seen in table 9 below. Likewise, the results of the above calculations reveal this impact both directly and indirectly.

Table 9. Direct and Indirect Effects of Competence on Employee Performance

Interpretation of Path Analysis			
Desc		Influence	%
X2	Direct effect to Y	0.07236	7.2361
	Indirect effect through X ₁ to Y	0.08188	8.18782
Total		0.15424	15.4239

Source: Statistical Processing Results SPSS Program

Above the table, it is apparent that the contribution of competence to employee performance directly amounted to 7.2361% with a tcount coefficient of 9. According to the empirical evidence, it can be concluded that competence has a significant direct impact on employee performance. The contribution of competence to employee performance as a whole is 15.4239%. This suggests that in order to enhance employee performance, it is necessary to focus on improving competency factors. Competency factors play a vital role in improving employee performance as they are closely linked. The path coefficient indicates a positive and significant value, which means that an individual's competence level influences their attitudes and abilities at work, consequently enhancing their performance. Asthon (1996 b: 19) defines competence as "The description of the knowledge, skills, attitudes and abilities of an employee to achieve the most effective performance." Furthermore, Traves in Murley (1997: 21) emphasizes that an employee's competence is the most crucial factor in boosting their performance.

"The level of skills and knowledge possessed by an employee to be able to achieve certain service performance and produce the best service" is what Zeithaml (1990: 21) supports as competence. This capability is defined as "the capability of a person to use the skills

possessed, in order to produce the best service performance". After examining the statement provided, it becomes evident that the measurement of employee performance relies on various aspects of competence such as capability, knowledge, quality, and ability. However, it appears that the West Java Provincial Education Office may have additional motives when assessing performance. These motives may include a focus on power dynamics, proximity to higher-ups, or the loyalty employees exhibit towards their superiors.

The employees at the West Java Provincial Education Office have displayed commendable performance overall, particularly in terms of their sense of responsibility in handling tasks. The majority of employees have successfully accomplished the expected work standards. Notably, they consistently strive to enhance the quality of their work and exhibit excellent performance even without direct supervision from their superiors. The enthusiasm and accountability exhibited by the employees serve as indicators for measuring work performance, which is deemed highly satisfactory in this context. The performance of employees can be affected by the use of technology and their skills. The extent of employee performance, whether individually or as a group, relies on how efficiently and effectively technology is applied, in line with their competencies. Therefore, if one's competence and the application of technology are enhanced, employee performance will rise. This suggests that in order to enhance performance, it is crucial to improve and augment both the use of technology and the level of competence, as these factors have a strong correlation with performance improvement.

According to Wahyudi's opinion (2002: 101), after discussing the matter, it was discovered that the two variables greatly impact performance. In order for employees to excel in their work, they must meet five basic conditions as outlined by Wahyudi (2002: 101). These conditions are essential for a periodic and systematic evaluation of performance. Let's now take a look at the four specific conditions referred to. Obtained from the results of their work, work ability in carrying out good work (competence) is achieved. Training and development programs, leading to successful participation; In order to improve work discipline and motivate work, job satisfaction is crucial for enhancing performance. Direct and indirect compensation affects 4) employee attitudes towards their work.

Based on this perspective, it becomes apparent that various factors have an impact on performance. These factors include competence, training programs, professional growth, job satisfaction, motivation, adherence to work principles, employee attitudes, and the utilization of information technology. It can be deduced that the improvement in performance is directly influenced by both the effective use of information technology and the level of competence displayed by the employees.

CONCLUSION

The West Java Provincial Education Office has generally received information technology, but there is still less attention given to the ease with which employees can use it. At the West Java Provincial Education Office, employees have a high level of competence to meet the sub-district's needs. However, there are areas that require attention, such as insufficient management and organization leading to untimely completion of tasks. Additionally, work partners lack guidance in their duties and are unable to fulfill all managerial responsibilities.

At the West Java Provincial Education Office, there are a few factors that contribute to the relatively low employee performance. These include employees who don't put in enough effort to meet the set standards, below-average abilities, and a quantity of work that falls short compared to other employees. The use of Information Technology and competencies have a simultaneous impact on employee performance. However, to some extent, the application of information technology has a greater influence on employee performance rather than

competence. Additionally, the impact of competence and the Application of Information Technology on performance can be partially described as follows:

The utilization of information technology has a significant impact on employee performance. It can be observed that as the level of information technology implementation increases among employees, there is a subsequent improvement in their performance. The performance of employees is influenced by their competence. Hence, when employees possess the required level of competence, their performance is bound to enhance as well. Through the implementation of practical information technology and providing employees the ability to utilize it, one can enhance the application of Information Technology and subsequently boost employee performance. The organization is currently facing challenges in terms of employee competencies, particularly in managing and organizing work to meet deadlines, directing work partners effectively, and fulfilling all managerial responsibilities. In order to address these issues, it is recommended that the organization offer education and training programs for employees who may be lacking in these areas.

There is a need to address the issue of employee performance, particularly when it comes to those who show little effort in improving their performance and display skills that fall significantly below the expected standards. Moreover, their work output is consistently below the average compared to their colleagues. In order to tackle this problem, it is crucial to prioritize the implementation of Information Technology as it has a significant impact on employee performance. Therefore, it is recommended that the Provincial Education Office of Java Bara provides the necessary Information Technology tools in a manner that facilitates ease of use, thus enabling employees to carry out their work more efficiently and professionally.

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