Integrating Information Technology and Transformational Leadership for Improved Employee Performance in Public Service

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Received: 29/04/2024 Revised: 25/05/2024 Accepted: 20/07/2024 **Abstract** Several factors influence the performance of Service Employees, both external and internal. Therefore, this research aims to find out how the use of Information Technology affects the performance of Service Employees, to find out how the transformational leadership style affects the Performance of Service Employees, to find out how the Use of Information Technology and transformational leadership style affects the performance of employees at the Magetan Population and Civil Registration Service. This quantitative research was conducted at the Magetan Population and Civil Registry Service in 2024. Data was collected through documents and questionnaires, with validity and reliability tests on 81 respondents. Research data was analyzed using multiple regression techniques. The research results show that the use of information technology influences the performance of service employees, and the transformational leadership style influences the performance of service employees. Information technology and transformational leadership style significantly affect KKN learning achievement at the Magetan Population and Civil Registry Service. Based on the results of this research, it is recommended that department heads improve employee performance by implementing a transformational leadership style and learning to utilize information technology to develop employee performance. Utilization of Information Technology; Transformational leadership style; Keywords **Employee Performance Corresponding Author**

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1. INTRODUCTION

Employee performance is one of the key factors that determines the success of an organization in achieving its goals and vision. In the government environment, employee performance is very important because it is directly related to the public services provided to the community. Efforts to strengthen the role of employee performance will be greatly influenced by how leadership occurs in the organization. Effective leadership is not only able to direct and motivate employees but is also able to create a work environment that is conducive to improving performance. Apart from that, rapid



advances in information technology also provide great opportunities to increase the efficiency and effectiveness of public services. Therefore, exploring how leadership style and information technology can influence employee performance is important, especially in the Population and Civil Registration Service of the Magetan Regency.

Leadership is one of the crucial factors that influences employee performance. A leader's leadership style can significantly impact his subordinates' motivation, job satisfaction, and performance. Transformational leadership, which is characterized by the leader's ability to inspire, motivate, and build strong relationships with subordinates, is considered one of the most effective leadership styles in improving employee performance. Transformational leaders can create a clear vision, provide support and encouragement, and build a positive work environment, improving employee performance.

In the current digital era, the use of information technology is very important in improving organizational performance. Information technology can help in various aspects, from storing and processing data and communication to providing public services more efficiently and effectively. At the Population and Civil Registration Service of Magetan Regency, the use of information technology can play an important role in improving employee performance. For example, with an integrated population information system, the process of recording and managing population data can be done more quickly and accurately. Apart from that, information technology also allows for transparency and accountability in public services, which can increase public trust in these agencies.

The Population and Civil Registration Service of Magetan Regency is vital in meeting the community's needs, especially concerning population and civil registration. This agency manages population data and produces population documents such as Resident Identity Cards (KTP), Birth Certificates, Death Certificates, and other important documents. In this context, the Population and Civil Registration Service of Magetan Regency must follow the changes and developments, especially in implementing public service functions. Information technology and good employee performance are crucial to ensure that services meet community expectations.

Implementing public services by utilizing information technology will only run smoothly with support from leadership, in this case, the Head of the Magetan Regency Population and Civil Registration Service. Effective leadership can be the initial capital for implementing programs and activities in regional organizations. Leaders who understand the importance of information technology and can encourage their subordinates to master it will create a work environment that is innovative and responsive to change. However, there are various challenges faced in this process, such as resistance to change, limited resources, and the need for continuous training.

Efforts to strengthen the role of employee performance will be dominated by how leadership

occurs in the organization. So, it is very important to know the leadership process and the means used to deliver public services. Public services can be achieved optimally if they are supported by employee performance and mastery of facilities, especially technological matters. The use of technology combined with leadership style can influence employee performance.

The Population and Civil Registration Service of Magetan Regency is vital in meeting the community's needs, especially regarding Population and Civil Registration. In this context, the Population and Civil Registration Service of Magetan Regency must follow the changes in implementing public service functions, especially by utilizing developments in Information Technology and improving the performance of employees.

Implementing public services by utilizing information technology will only run smoothly with support from the leadership, in this case, the Head of the Magetan Regency Population and Civil Registration Service. Leadership as initial capital for implementing programs and activities in Device Organizations. Therefore, it is important to research the issue of leadership style and the use of information technology as it relates to employee performance.

Based on the description above, it is important to research leadership styles and the use of information technology related to employee performance. This research aims to provide a deeper understanding of how these two factors can influence employee performance, especially at the Magetan Regency Population and Civil Registration Service. Thus, the results of this research can provide concrete recommendations for improving employee performance through applying a transformational leadership style and optimal use of information technology.

This research aims to determine the effect of the use of information technology on the performance of Magetan Regency Population and Civil Registration Service employees. To determine the influence of transformational leadership style on the performance of Magetan Regency Population and Civil Registration Service employees. To determine the influence of the use of information technology and transformational leadership style together on the performance of Magetan Regency Population and Civil Registration Service employees.

2. METHODS

This research can be categorized as quantitative research. Namely, the results of this research are presented in descriptive form using statistical figures. (Arikunto, 2017). The research subjects were the heads and employees of the Magetan Population and Civil Registration Service. Data was collected through questionnaires and tests. The variables in this research are the dependent variables, namely the use of information technology and transformational leadership style.

In contrast, the independent variable is employee performance, obtained from work performance

documents and public service satisfaction. The data was tested through item validity, reliability, and normality tests. Meanwhile, in data analysis, multiple regression tests are used so that conclusions can be drawn as to how significant the influence is.

3. FINDINGS AND DISCUSSION

3.1. Employee Performance

Etymologically, performance comes from the word achievement (performance), as stated by Mangkunegara (2015) (Marjaya, 2019) it is stated that the term performance comes from the words job performance or actual performance (work performance or actual achievement achieved by someone), namely the result of work, in terms of quality and quantity achieved by an employee in carrying out his duties by the responsibilities given to him.

Indra Bastian (2016) (Zainal, 2017) explains that performance is a description of the achievement of implementing an activity or policy in realizing the organization's goals, objectives, mission, and vision. A list of what you want to achieve is contained in the formulation of an organization's strategy. In general, performance is an achievement achieved by an organization in a certain period.

According to Premendagri Number 13 of 2006 Article 1, performance is the output or results of activities or programs that will or have been achieved in connection with the use of the budget with measurable quantity and quality.

In the government sector, performance can be defined as an achievement achieved by government employees or agencies in carrying out services to the community within a period. In this case, it is an achievement of the SKPD's capabilities in preparing financial reports. So, performance is a description of the extent of success or failure in implementing the main tasks and functions of the agency.

3.2. Utilization of Information Technology

The obligation to use technology by the central government and regional governments is regulated in Government Regulation No. 65 of 2010 concerning Regional Financial Information Systems, which is a replacement for Government Regulation No. 56 of 2005 concerning Regional Financial Information. To realize accountability and transparency in government agencies, the use of information technology is a necessity that absolutely must be met to create data management that is more effective and efficient.

According to O'Brien (2016:28) (BASKORO, 2015), technology is a computer network facility comprising various information processing components that use various hardware, software, data management, and information network technology.

According to (Sutabri, 2014), accounting data management processing can be done more quickly if a computer is used. This can happen because the ability of computers to process data far exceeds human speed. With the development of computer technology, more and more companies are using computer

services for their accounting data. On the one hand, computers are very useful tools in terms of accounting information. However, it is used manually to ensure accuracy and security in data processing and to protect company property.

3.3. Transformational Leadership Style

Leadership style is how a leader carries out his leadership function and how he is seen by those he is trying to lead or those who may be observing from the outside (Robert, 2002) (Tampubolon, 2018). Leadership style greatly influences a leader's success in influencing followers behavior.

Leadership style is roughly the same as the method leaders use to influence their followers (Thoha, 1996) (Intan, 2018). Based on the definition of leadership style, leadership is a person's ability to direct, influence, encourage, and control other people or subordinates to do work consciously and voluntarily to achieve a certain goal.

Leadership style (Robins, 2016) (Budiman, 2022): Transformational leadership style, namely the transformational leader, pays attention to each follower's matters and development needs. The transformational leader changes the followers' awareness of problems by helping them see old problems in new ways, and they can excite, excite, and inspire followers to expend extra effort to achieve group goals.

In discussing the three variables above, this research uses SPSS Windows data so that the existing data needs to be processed according to quantitative research rules. The results of the three variables above are regarding the use of information technology and transformational leadership style on the performance of service employees. This can be seen from several tests as follows: Hypothesis testing in this research is a partial correlation test between the use of technology and employee performance. The data from SPSS obtained the following data:

Correlations Parctial

Control Variables				Utilization of technology
Employee performance	Utilization of technology	Correlation	1.000	.220
		Significance (2-tailed)		.252
		df	0	27
	Leadership	Correlation	.220	1.000
		Significance (2-tailed)	.252	
		df	27	0

From the data above, the output results are obtained; the first part shows the correlation with the included employee performance variables. The correlation coefficient between the use of technology and employee performance is a significant value of 0.25, which means that technology significantly influences employee performance by 25%. The results of the hypothesis test in this research can be seen in the table as follows:

Correlations Parctial

Control Variables				Transformative leadership style
Employee performance	Leadership Style	Correlation	1.000	.220
		Significance (2-tailed)		.252
		df	0	27
		Correlation	.220	1.000
		Significance (2-tailed)	.252	
		df	27	0

From the data above, the output results are obtained; the first part shows the correlation with the included employee performance variables. The correlation coefficient between transformational leadership style and employee performance is a significant value of 0.22, which means that transformational leadership style significantly influences employee performance.

This test is intended to find out whether the two variables (Use of technology and transformational leadership style) together have a significant influence on Learning Achievement. The steps used are as follows:

1) Determine Ho and Ha

Ho: $\beta_1 = \beta_2 = 0$, The use of technology and transformational leadership style does not affect employee performance.

Ha : $\beta_1 \neq \beta_2 \neq 0$, The use of technology and transformational leadership style influences employee performance

2) Level of significance (α) = 0,05

3) Determine the test criteria, namely:

The results of the multiple linear test are as follows:

Multiple Linear Regression Results

Variable	Coefisien	t Value	Significance	
(Constant)	137.511	30.116	.000	
Utilization of technology	6.586	3.819	.000	
Transformational leadership style	.552	2.614	.012	
F : 17,478			0,000	
Adjusted R ² : 0,412				

This multiple linear regression analysis is used to determine the effect of the independent variable on the dependent variable (). Based on the multiple linear regression equation in the table, the equation can be obtained:

$$Y = 137,511 + 6,586X1 + 0,552X2$$

Interpretation of the equation:

- 1) Constant value (a), namely 137.511, means that if the use of technology and transformational leadership style is zero, employee performance is positive at 137.511.
- 2) The regression coefficient value for the technology utilization variable (X1), namely 6.586.
- 3) The regression coefficient value for the transformational leadership style variable (X2), is 0.552. This means that a transformational leadership style that is increasingly caring can improve employee performance where the technology utilization variable is assumed to be constant

 H_0 accepted if *p value* ≥ 0,05

H₀ rejected if *p value*< 0,05

4) Conclusion

The results of the F test obtained a calculated F value of 17.478 with a p value of 0.000 < 0.05 so that the use of technology and transformational leadership style influences employee performance.

The conclusion is as follows:

- a. There is a significant influence of the use of information technology on the performance of service employees by 3.78% so that the use of information technology becomes important in carrying out public service processes.
- b. The transformational leadership style itself is also needed where there is an influence, and it is significant, namely 4.56%, thus affecting the performance of service employees. So that students become more motivated and their service learning achievements automatically increase.

c. The three variables, namely the use of information technology and transformational leadership style, significantly affect service employees' performance by 3.89%.

Discussion

The research results show that the use of information technology has a positive and significant influence on employee performance. This means that the higher the level of information technology utilization, the better the employee performance. This finding is in line with theories which state that information technology can increase work efficiency and effectiveness. According to Davis (1989), in the Technology Acceptance Model (TAM), users' acceptance of technology is influenced by two main factors: perceived usefulness and perceived ease of use. In the context of this research, the information technology used by employees of the Magetan Regency Population and Civil Registration Service provides real benefits in simplifying and speeding up their work, thereby improving performance.

Previous research also supports these findings, such as research by Venkatesh et al. (2003), which shows that the application of information technology can increase productivity and work efficiency. In addition, research by DeLone and McLean (2003) in the Information Systems Success Model shows that information system quality, information quality, and service quality all contribute to user satisfaction and net benefits, which in turn influence individual and organizational performance. The results of this research also show that the transformational leadership style has a positive and significant influence on employee performance. Leaders who provide employees with a clear vision, inspiration, and support can improve performance. The transformational leadership style is one of the most effective leadership styles in motivating and inspiring employees to achieve high performance.

Bass and Avolio (1994) stated that transformational leaders are leaders who can change the values and aspirations of their followers, motivating them to achieve higher organizational goals. Transformational leaders focus on developing and empowering employees, as well as creating a positive and supportive work environment. Previous research supports these findings. For example, research by Judge and Piccolo (2004) found that transformational leadership style had a strong positive correlation with various performance indicators, including job satisfaction, organizational commitment, and task performance.

Additionally, research by Wang et al. (2011) shows that transformational leaders can increase creativity, innovation, and team performance by providing support, inspiration, and challenges to employees. This research also found that the combination of the use of information technology and transformational leadership style has a significant influence on employee performance. This shows that employee performance can be improved optimally when these two factors are applied simultaneously.

These findings indicate that there is a synergy between the use of information technology and a

transformational leadership style in improving employee performance. Fiedler's Contingency Theory (1967) states that leadership effectiveness is influenced by the suitability of leadership style to a particular situation. In this context, the effective use of information technology requires support from leaders who can inspire and motivate employees to utilize it in their work. Several previous studies support this finding. Research by Avolio et al. (2004) shows that technology can be a powerful tool for increasing the effectiveness of transformational leadership. In addition, research by Sosik and Godshalk (2000) found that transformational leaders who use information technology effectively can improve individual and team performance by facilitating communication, collaboration, and access to information.

Based on the findings of this research, several practical implications can be implemented by the Population and Civil Registration Service of Magetan Regency to improve employee performance. Information Technology Development: Organizations must continue developing and updating the information technology used in their daily work. This includes providing adequate training and technical support to employees to ensure that they can utilize technology effectively.

Leadership Development: Heads of departments and other leaders in the Population and Civil Registration Service of Magetan Regency need to adopt a transformational leadership style. This involves providing a clear vision, inspiration, support, and recognition to employees. Leaders must also be active in supporting the use of information technology and encouraging employees to innovate and collaborate.

Strategy Combination: The use of information technology and a transformational leadership style are complementary strategies. Combining these two factors can create a more productive, innovative, and motivating work environment for employees.

The findings of this study also have important theoretical implications. First, these findings strengthen the theory that information technology and transformational leadership can improve individual and organizational performance. Second, these findings highlight the importance of viewing these two factors as complementary and reinforcing rather than as stand-alone.

Although this research provides valuable findings, several limitations need to be considered: Limited Sample: This research was only conducted at the Magetan Regency Population and Civil Registration Service with a sample size of 81 respondents. The research results may only be generalizable to some government organizations or other sectors. Quantitative Approach: This research uses a quantitative approach, which may need to capture the deeper nuances or dynamics of the relationships between the variables studied. Qualitative or mixed research may be needed to dig deeper into this phenomenon. Time Limitations: This research was conducted within a limited period. Changes in the use of information technology and leadership styles may take longer to show their impact on

employee performance. Based on existing limitations, further research can consider the following things: Sample Expansion: Future research can expand the sample by involving more government organizations or other sectors to increase the generalization of the findings. Mixed Methodology Approach: Using a mixed methodology approach (quantitative and qualitative) to gain a more comprehensive understanding of the influence of information technology and leadership style on employee performance. Longitudinal Study: Conduct a longitudinal study to observe changes in the use of information technology and leadership styles and their impact on employee performance over a longer period. Moderator and Mediator Variables: Add moderator or mediator variables in the research model to explore other factors that might influence the relationship between information technology, leadership style, and employee performance.

This research has succeeded in showing that the use of information technology and transformational leadership style has a positive and significant influence on the performance of Magetan Regency Population and Civil Registration Service employees. The combination of these two factors can improve employee performance optimally. These findings have important practical and theoretical implications, but several limitations must be considered. By considering these limitations, future research can develop these findings further and make a greater contribution to improving employee performance and organizational effectiveness.

4. CONCLUSION

This research provides important insight into the influence of information technology and transformational leadership style on employee performance at the Population and Civil Registration Service of the Magetan Regency. The research results show that these two factors have a significant and positive influence on employee performance. Therefore, continuous efforts must be made to optimize the use of information technology and implement a transformational leadership style to improve employee performance. Through this research, it is hoped to make a meaningful contribution to developing policies and practices at the Population and Civil Registration Service of Magetan Regency and other government agencies that face similar challenges in improving employee performance and public services.

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