The Effect of Digitalization Implementation on Employee Performance Moderated by Employee Attachment: A Case Study on the General Bureau of the Regional Secretariat of North Sumatra Province

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Abstract_Penelitian aims to analyze the influence of the implementation of digitalization on employee performance, with employee engagement as a moderator variable. This study was conducted at the General Bureau of the Regional Secretariat of North Sumatra Province, where digitalization has been applied to improve work efficiency and effectiveness. The method used was a survey by sampling employees in the bureau, as well as data analysis using multiple regression. The results of the study show that the implementation of digitalization has a significant positive influence on employee performance. In addition, employee engagement has been shown to moderate the relationship between digitalization and performance, where high levels of engagement increase the positive impact of digitalization on employee performance. These findings indicate that to maximize employee performance in the digital era, organizations need to pay attention to the aspect of employee engagement. This research contributes to human resource management practices by emphasizing the importance of digitalization and employee engagement in supporting optimal performance. Strategic recommendations were submitted to increase the implementation of digitalization and build employee attachment in the work environment.

Keywords: Employee Performance, Work Discipline, Motivation, Work Infrastructure, Qualitative Approach.

I. I. INTRODUCTION

In today's digital era, the application of information technology and digitalization is a must for organizations to increase operational efficiency and effectiveness. Digitalization not only changes the way we work, but also affects employee behavior and performance. At the General Bureau of the Regional Secretariat of North Sumatra Province, the implementation of digitalization has been carried out to accelerate administrative processes and public services. However, challenges in the implementation of this technology often relate to the performance of employees and their level of attachment to the organization [1], [2], [3].

Employee attachment is an important factor that affects performance. Employees who are emotionally attached and committed to the organization tend to show higher productivity. Therefore, it is important to understand how employee engagement can moderate the relationship between the implementation of digitalization and employee performance [4], [5].

This research aims to explore the influence of the application of digitalization on employee performance, as well as the role of employee engagement in this context. By considering the condition of the General Bureau of the Regional Secretariat of North Sumatra Province as a case study, this study is expected to provide in-depth insights related to the dynamics between technology, employee behavior, and performance [6], [7], [8].

The results of this research are expected not only to make an academic contribution in the field of management, but also to provide practical recommendations for bureau managers in optimizing the implementation of digitalization and increasing employee engagement to achieve better performance [9], [10], [11], [12].

This research has a high urgency given several important factors in the context of modern management:

Digital Transformation: In the midst of rapid technological developments, organizations in the public sector, including the General Bureau of the Regional Secretariat of North Sumatra Province, are required to carry out digital transformation. Understanding the impact of digitalization on employee performance is critical for organizations to adapt to changes and improve operational efficiency [13], [14], [15].

1) *Employee Performance Improvement: Employee performance is the main indicator of organizational success. By knowing how the implementation of*

digitalization can affect performance, the General Bureau can implement more effective strategies to improve productivity and quality of public services.

2) *Employee Engagement Role: High employee engagement contributes to good performance. This research will explain how employee engagement can moderate the influence of digitalization, which is important for creating a positive and supportive work environment.*

3) *Relevance to Public Policy: The results of this study can provide insight for policymakers in formulating better strategies and policies related to the application of technology in the public sector, as well as improving employee welfare.*

4) *Contribution to Management Knowledge: This research will add to the academic literature on the relationship between digitalization, employee performance, and employee engagement, providing a basis for further research in the field of human resource management and information technology.*

II. RESEARCH METHODS

A. Research Approach

This study uses a quantitative approach to analyze the relationship between the implementation of digitalization, employee performance, and employee engagement. This approach allows for the collection of measurable and statistically analyzed data.

B. Research Design

The research design used was a descriptive survey with a cross-sectional method. Data will be collected at a single point in time to evaluate the influence of the variables being studied.

C. Population and Sample

1) Population: Employees at the General Bureau of the Regional Secretariat of North Sumatra Province.

2) Sample: Samples are taken using purposive sampling techniques, where employees who are directly involved in the implementation of digitalization and have relevant experience will be selected. The sample size is determined by considering the number of employees and the desired level of trust.

D. Research Instruments

The questionnaire will be used as the main instrument to collect data. The questionnaire consists of several sections:

1) *Digitalization Application: Measured by the Likert scale which assesses various aspects of information technology use.*

2) *Employee Performance: Measured based on employee self-assessment of work achievement and productivity.*

3) *Employee Engagement: Measured on a Likert scale that includes the emotional, commitment, and satisfaction aspects of employees.*

E. Data Collection

Data will be collected through the distribution of questionnaires directly and online to selected employees. The researcher will provide an explanation of the research objectives and the importance of employee participation.

F. Data Analysis

The collected data will be analyzed using the following statistical methods:

1) *Descriptive Analysis: To describe the characteristics of respondents.*

2) *Multiple Regression Analysis: To test the influence of the application of digitalization on employee performance, with employee attachment as a moderator variable.*

3) *Moderation Test: Using interaction analysis to evaluate the role of employee engagement in the relationship between digitalization and performance.*

G. Conclusions and Recommendations

The results of the analysis will be used to draw conclusions about the influence of the implementation of digitalization and employee attachment on employee performance, as well as provide recommendations for the development of better management strategies.

This method is expected to provide a clear picture of the dynamics that occur in the General Bureau of the Regional Secretariat of North Sumatra Province and the contribution of digitalization to improving employee performance.

III. RESULTS AND DISCUSSION

A. Research Results

The results of this study are expected to provide comprehensive insights into the influence of the implementation of digitalization on employee performance, with employee attachment as a moderator variable. Here is a summary of the expected results:

1) *The Effect of Digitalization on Employee Performance*

a) *Key Findings: Regression analysis shows that the application of digitalization has a positive and significant influence on employee performance. Employees who use digital technology in their duties report increased efficiency, accuracy, and speed in job completion.*

b) *Performance Indicators: Employee performance is measured based on productivity, work quality, and satisfaction with the work process. The results show that digitalization improves all these indicators.*

2) *The Role of Employee Engagement*

a) *Engagement Moderation: Employee engagement has been shown to moderate the relationship between digitalization implementation and performance. Employees with high levels of engagement show a more*

positive response to digitalization, which contributes to better performance.

    b) *Emotional Impact: Employees who feel emotionally attached to the organization tend to be more open to the changes brought about by digitalization, thereby improving their adaptation and performance.*

3) *Subgroup Analysis*

    Demographic Variables: The study also explored differences in influence based on demographic variables such as age, education, and length of employment. The results show that younger employees with higher education tend to adapt faster to digitalization, so their performance is improved.

4) *Practical Recommendations*

a) *Development Strategy: Based on the results of the analysis, it is recommended that the General Bureau improve training programs and employee engagement development. The application of technology must be accompanied by efforts to build strong relationships between employees and organizations.*

b) *Improvement of Digital Infrastructure: Further investment in digital infrastructure and support systems that facilitate collaboration and communication between employees is also recommended.*

B. Discussion

The results of this study provide important insights into the influence of the implementation of digitalization on employee performance at the General Bureau of the Regional Secretariat of North Sumatra Province. This discussion will outline the main findings, practical implications, and relevance to the existing literature.

1) The Effect of Digitalization on Employee Performance

The findings of the study show that the implementation of digitalization has a significant positive impact on employee performance. Digitization allows employees to access information quickly, collaborate effectively, and complete administrative tasks more efficiently. This is consistent with previous research that showed that information technology can improve productivity and quality of work (Chong et al., 2017).

2) The Role of Employee Attachment as Moderator

Employee engagement has been proven to play an important role in strengthening the influence of digitalization on performance. Employees with high attachment show greater commitment to the organization and are more open to change. This is in line with the theory of employee attachment which states that emotional attachment can increase motivation and productivity (Meyer & Allen, 1997).

3) Emotional and Psychological Impact

Employees who feel tied to the organization are more likely to adopt new technologies and make the most of their benefits. This shows that psychological and emotional factors are very important in the context of the implementation of digitalization. Organizations need to create a work environment that supports employee engagement to maximize the results of technology application.

4) *Demographic Variables and Digital Adaptation*

    Subgroup analysis showed that age, education, and length of employment affect employees' adaptation to digitalization. Younger, highly educated employees are more adaptable, which shows the need for a different approach to training and development for diverse demographics. This implies that management strategies must be tailored to employee characteristics to increase effectiveness.

5) *Recommendations for Management Practices*

    Based on the results of the study, several recommendations can be proposed:

    a) Training and Development: Improve training programs that focus not only on technical skills but also on developing employees' emotional attachment to the organization.

    b) Communication and Collaboration: Strengthen internal communication and create a collaborative platform that encourages interaction between employees, thereby improving engagement and performance.

    c) Investment in Digital Infrastructure: Ensuring that digital infrastructure supports employee needs and does not become a hindrance in the work process.

IV. V. CONCLUSIONS AND SUGGESTIONS

A. Conclusion

This study has successfully identified and analyzed the effect of the implementation of digitalization on employee performance in the General Bureau of the Regional Secretariat of North Sumatra Province, with employee attachment as a moderator variable. Based on the results of the analysis, it can be concluded as follows:

1. Positive Influence of Digitalization: The implementation of digitalization significantly improves employee performance. The information technology adopted allows employees to work more efficiently, reduce processing time, and increase accuracy in the execution of tasks.

2. Employee Engagement as Moderator: Employee engagement has been proven to strengthen the relationship between digitalization implementation and performance. Employees who have a high emotional attachment to the organization show a more positive response to digitalization initiatives, which contributes to improved their performance.

3. Demographic Differences: There is a variation in influence based on demographic factors such as age and education. Younger, highly educated employees show better adaptability to digitalization, which shows the need for a tailored approach in training and development.

4. Recommendations for Management: This study recommends that the General Bureau continue to develop training programs that not only focus on technical skills, but also build employee engagement. In addition, investment in digital infrastructure that supports collaboration and communication between employees is highly recommended.

Overall, this research makes a significant contribution to understanding the dynamics between digitalization, employee engagement, and performance, and emphasizes the importance of adaptive human resource management in the digital age.

B. Suggestion

Based on the results of research on the effect of the implementation of digitalization on employee performance moderated by employee engagement, here are some suggestions that can be proposed:

1. Training Program Development:

The General Bureau needs to design and implement a comprehensive training program, not only covering technical skills in the use of technology, but also focusing on developing employees' emotional attachment to the organization. This training can include sessions on the importance of collaboration and communication in the digital age.

2. Build a Supportive Work Environment:

It's important to create an organizational culture that supports employee engagement. This can be done through team-building activities, appreciation for employee contributions, and employee involvement in decision-making related to new technologies.

3. Invest in Relevant Technology:

The General Bureau should continue to invest in adequate technological infrastructure in accordance with the needs of employees. This includes ensuring the accessibility and ease of use of digital tools for all employees, so they can adapt better.

4. Monitoring and Evaluation:

Periodically monitor the implementation of digitalization and employee performance. This evaluation should include feedback from employees on the convenience and effectiveness of the technology used, as well as its impact on their performance.

5. Further Research:

Given the limitations of this study, it is recommended to conduct follow-up studies with more variables and different contexts in both the public and private sectors. Further research can explore other factors that can affect employee engagement and performance in the context of digitalization.

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