

EXAMINING EMPLOYEE ENGAGEMENT AS A MODERATING VARIABLE IN THE RELATIONSHIP BETWEEN DIGITAL ORGANIZATIONAL CULTURE, EMPLOYEE DEVELOPMENT TRAINING, AND EMPLOYEE PRODUCTIVITY

Muhammad Iqbal Wiryaprawira¹, Feti Fatimah², Budi Santoso³

¹⁻³ Master of Management Study Program, Faculty of Economics and Business, University of Muhammadiyah Jember

faiq2278@gmail.com¹, fetifatimah@unmuhjember.ac.id², budisantoso@unmuhjember.ac.id³

Correspondence: faiq2278@gmail.com

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ABSTRACT

This study aims to analyze the influence of digital organizational culture and employee development training on employee performance productivity with employee engagement as a moderation variable in the General Section of the Jember Regency Regional Secretariat. The study uses a quantitative approach with a survey method through the distribution of questionnaires to employees as respondents. The data was analyzed using the Structural Equation Modeling (SEM) approach based on Partial Least Squares (PLS). The results of the study show that Digital Organizational Culture does not have a positive and significant effect on Employee Performance Productivity. Employee Development Training does not have a positive and significant effect on Employee Performance Productivity. Employee Engagement has been proven to moderate the relationship between Digital Organizational Culture and Employee Performance Productivity. Employee Engagement has been shown to moderate the relationship between Employee Development Training and Employee Performance Productivity. Employee Engagement has the strongest direct influence on Employee Performance Productivity compared to other variables. This shows that the level of employee attachment is a key factor in increasing work productivity within the Jember Regency Regional Secretariat.

INTRODUCTION

Research on the influence of organizational culture and training on employee performance has been the focus of attention in various empirical studies. In general, findings from various studies indicate that both organizational culture and training programs make a significant contribution to increasing employee work productivity (Riatmaja et al., 2024). A conducive organizational culture is seen as able to form positive work behaviors that support work efficiency and effectiveness, while appropriately designed training has proven to be important in improving technical competence and individual adaptive ability to the dynamics of the changing work environment.

One of the variables that has recently begun to gain attention is *employee engagement*, namely the emotional, cognitive, and behavioral involvement of employees towards work. This variable is considered to have the potential to be a moderating variable in the relationship between organizational inputs such as organizational culture and training and work output in the form of employee performance (Tianto & Mirwan Surya P, 2022). However, studies that explicitly test *employee engagement* As a moderation variable in the context of the influence of organizational culture and training on performance is still relatively limited, and is generally only carried out in certain sectors or regions, such as the education sector or the manufacturing industry in the local area (Rizky, 2024).

Most previous studies have tended to evaluate the influence of organizational culture or training on performance in isolation, with *employee engagement* being placed as an intervening variable, rather than a moderation variable. In fact, a high level of employee involvement can be an important determinant in strengthening the positive influence of organizational culture and training on work productivity, especially in the context of organizational change and digital transformation. Therefore, there is an urgent need for a comprehensive study of how organizational culture and employee training simultaneously affect performance, as well as how *employee engagement* plays a role as a moderation variable in these relationships. Such studies are expected to make substantial theoretical and practical contributions to the development of the literature on human resource management and organizational governance, especially in the context of digital transformation in public and private sector organizations.

Real implementation challenges are still faced by many government agencies, including the General Section of the Jember Regency Regional Secretariat Office, in realizing an effective digital organizational culture and in optimizing the impact of employee development training. The training held often does not make a significant contribution to increasing work productivity, which is caused by the low level of employee involvement and the incompatibility of training materials with the demands of digitizing public services. This is a serious obstacle in efforts to improve the quality of public services and the effectiveness of employee performance. Unfortunately, there have not been many studies that comprehensively examine the role of *employee engagement* as a factor that strengthens the relationship between digital organizational culture, training, and employee performance. Therefore, in-depth follow-up studies are urgently needed to fill such gaps in the scientific literature.

Empirically, organizational culture and human resource development training have been shown to play an important role in improving employee performance productivity.

Based on data from the Ministry of Manpower of the Republic of Indonesia (2023), around 53% of formal companies in Indonesia have held training programs on a regular basis, especially in the industrial and service sectors. The training aims to improve technical competence and adaptation capacity to changes in the increasingly digitized work environment. Research by (Akase et al., 2025) emphasized that training and human resource development have a positive impact on performance, both directly and indirectly through the involvement of employees as mediators. In line with that, Atapour et al. (2024) show that organizational investment in training contributes significantly to improving employee capabilities and work efficiency.

In terms of organizational culture, a study by Zulpikar et al. (2024) indicates that a supportive work culture, such as open communication and appreciation for innovation, is positively related to improving the performance of academic employees. Data from the Central Statistics Agency (2023) also strengthens these findings, where companies that implement value alignment between individuals and organizations experience an increase in productivity of 17–21%.

Although various organizations in Indonesia have adopted progressive work culture practices and implemented training programs on a regular basis, the effectiveness of these efforts has not shown optimal and consistent results. Study (Akase et al., 2025) shows that the impact of organizational culture and training on performance is strongly influenced by the level of *employee engagement* in the organization. A Gallup Indonesia survey (2023) revealed that only 21% of Indonesian employees are categorized as "engaged", which is to have a high emotional and psychological involvement in their work and organization. This low engagement rate is suspected to be one of the factors that causes the gap between organizational input and the performance outcomes achieved.

Marampa and Pongtuluran (2025) provide evidence that *employee engagement* has an important role in strengthening the relationship between *Psychological empowerment* and *innovative behavior* in an organization based on family values. (State Civil Service Agency, 2025) also showed an increase in ASN productivity by 6.5% in agencies that implemented training based on work needs and collaborative culture. Meanwhile, the private sector through the report *HR Outlook Indonesia* (2024) recorded an increase in employee output of 10–15% per year in organizations that integrate innovative cultures, continuous training, and *employee engagement* tall ones.

However, the majority of studies found that organizational culture and training have a significant influence on improving employee performance, especially when employee involvement is also taken into account. (Indah et al., 2022) shows that *employee engagement* can mediate the relationship between work motivation and performance, as well as organizational culture has a significant effect on performance improvement. (Rahmawati, 2024) found that training and organizational culture can significantly affect employee performance, but the direct effect of training on performance becomes significant only when *employee engagement* used as a moderation variable.

Research by (Afandi, 2025) emphasizing the importance of organizational culture and knowledge management in improving *employee engagement* and performance, although the moderation variable has not been explicitly tested. (Aji et al., 2025) highlights that *employee engagement* and organizational culture affects productivity, but digital culture does not show significant influence. (Septiyana et al., 2022) prove that

training and career development have a significant impact on *employee engagement*, which in turn improves performance, while the direct effect of training on performance is relatively weak. Similar things were also put forward by (Fauziah, 2020), where training and engagement increase the organization's commitment as an intermediary towards performance improvement.

Meanwhile, research by (Shabira, 2024) demonstrate a positive and significant relationship between training, career development, *employee engagement*, and performance. Some other studies such as (Lathifah & Kurniawati, 2021) and (Tamimi et al., 2022) supports the importance of organizational culture and training to performance, although it has not specifically examined the role of *employee engagement* or digital cultural aspects. This shows that although digital variables have not been explored in depth, *employee engagement* has proven to be a key element that moderates or mediates the relationship between managerial interventions (such as training and organizational culture) and employee performance outcomes.

It can be concluded that although the direction of the relationship between organizational culture, training, and performance has been extensively studied, the position of *employee engagement* as a moderation variable is still not optimally developed in an integrative and empirical conceptual framework, especially in the context of Indonesian organizations.

LITERATURE REVIEW

Digital Organizational Culture (X1)

Digital organizational culture related to employees is an important concept in modern human resource management, because it emphasizes the formation of values, attitudes, and work behaviors that are in harmony with the development of digital technology in the work environment. (Yonata & Arman, 2025) It shows that digital organizational culture has a direct correlation to increasing employee digital literacy, which in turn increases effectiveness and performance efficiency.

Employee Development Training (X2)

(Yonata & Arman, 2025) It shows that digital organizational culture has a direct correlation to increasing employee digital literacy, which in turn increases effectiveness and performance efficiency. In a dynamic organizational environment, training is not only focused on improving technical competencies, but also on developing soft skills such as leadership, communication, and adaptability to change, including digitalization.

Employee Engagement (W)

Employee engagement or employee attachment is a psychological condition in which employees demonstrate enthusiasm, commitment, and active involvement in the work and goals of the organization. According to (Rizal & Rony, 2024), employee engagement is formed through positive interactions between the work environment, a supportive leadership style, and clarity of roles and goals given to employees.

Employee Performance Productivity (Y)

Productivity Employee performance is the main indicator in assessing the

effectiveness of individual contributions to the achievement of organizational goals. Academically, performance productivity reflects the relationship between the output produced and the input used by an employee in the performance of his or her duties. According to (Fauzi & Purbasari, 2024), employee productivity will increase if the work environment encourages collaboration, innovation, and constructive conflict management.

RESEARCH METHODS

This study uses a descriptive analysis research method. The population in this study is all employees in the General Section of the Jember Regency Regional Secretariat, which amounts to around 115 people (adjusted to actual data). The sample was taken from the population with the following criteria: Permanent employees who have worked for at least 3 years, employees involved in employee development training programs and employees who use digital technology in their daily work. In this study, *SmartPLS software* was chosen as an analysis tool because it is in accordance with the characteristics of the data owned, namely the limited number of samples. In this study, to test the hypothesis, this study also tested two stratified hypothesis models, so it requires a tool that is able to handle the complexity of the relationship between variables effectively. SmartPLS meets these needs with its ability to process PLS-based structural models.

RESULTS AND DISCUSSION

1. Discriminatory Validity

Table 1.

Discriminant validiyi - Fornell – Larcker criterion

	Culture	Employee	Training	Productivity
Culture	0.762			
Employee	0.692	0.819		
Training	0.845	0.701	0.858	
Productivity	0.680	0.813	0.667	0.755

Source : Data processed research (2026)

Based on the table above, it can be seen that the root value of each variable > correlation between the construct and the other constructs, so it can be concluded that all variables are declared valid discriminatory.

2. Reliability Test

Table 2.

Contract reliability and validity – Overview

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Culture	0.815	0.817	0.872	0.580
Employee	0.752	0.767	0.859	0.671
Stuttgart	0.881	0.886	0.918	0.737

Productivity	0.812	0.832	0.868	0.571
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Source : Data processed research (2026)

Crombach's Alpha and Composite Reliability *values* are all variables >0.70, so all variables are reliable.

3. R Square

Table 3.
R-square - overview

	R-square	R-Square adjusted
Productivity	0.715	0.699

Source : Data processed research (2026)

The *R Square* value of the productivity variable of 0.715 indicates that the Culture, Training and *Employee Engagement* variables are able to explain the productivity variable of 71.5%. It can therefore be concluded that the model is considered strong.

4. Effect Size

Table 4. Table f square Matrix

	Productivity
Culture	0.000
Employee	0.642
Training	0.011
Productivity	
Employee x Culture	0.043
Employee x Training	0086

Source : Data processed research (2026)

The employee engagement variable has the largest effect size on work productivity, while work culture and direct training have a very small effect size. Employee *engagement* interaction with culture and training showed a small influence of moderation, so employee *engagement* played a weak moderator role.

Table 5. Path coefficients – Mean, STDEV, T values, p values

	Original sample (o)	Sample mean (M)	Standard deviation (STDEV)	T statistics (o/STDEV)	P values
Culture -> Productivity	0.007	0.051	0.147	0.048	0.481
Empllooye -> Productivity	0.680	0.674	0.162	4.188	0.000
Employee x Culture -> Productivity	-0.298	-0.248	0.160	1.863	0.031

Employee x Training -> Productivity	0.383	0.354	0.157	2.446	0.007
Training -> Productivity	0.138	0.099	0.189	0.733	0.232

Source : Data processed research (2026)

Table 6. Hypothesis

Relationships	Coefficient (O)	T-stat	P-value	Remarks
Culture → Productivity	0,007	0,048	0,481	Insignificant
Training → Productivity	0,138	0,733	0,232	Insignificant
Employee Engagement → Productivity	0,680	4,188	0,000	Significant
Employee × Culture → Productivity	-0,298	1,863	0,031	Significant (moderation)
Employee × Training → Productivity	0,383	2,446	0,007	Significant (moderation)

Source : Data processed research (2026)

Hypothesis Test Conclusion

1. H1 = Digital Organizational Culture has a positive and significant effect on Employee Performance Productivity is rejected, because $p\text{-value} = 0.481 > 0.05$, which means that Digital Organizational Culture does not have a significant effect directly on employee performance productivity.
2. H2 = Employee Development Training has a positive and significant effect on Employee Performance Productivity is rejected, because $p\text{-value} = 0.232 > 0.05$, which means that Training does not have a significant effect directly on employee performance productivity.
3. H3 = *Employee Engagement* moderates the relationship between Digital Organizational Culture and Productivity Employee Performance is accepted, because $p\text{-value} = 0.031 < 0.05$, which means that Employee Engagement plays a role as a moderation variable in the relationship between digital organizational culture and productivity. However, the moderation coefficient was negatively valued (-0.298) → indicate moderation weakened the relationship. Interpretation is important because digital organizational culture will have a different impact on productivity depending on the level of employee engagement.
4. H4 = *Employee Engagement* moderates the relationship between Employee Development Training and Employee Performance Productivity is accepted, because $p\text{-value} = 0.007 < 0.05$ which means a positive moderation coefficient (0.383).

CONCLUSIONS AND SUGGESTIONS

Based on the results of data analysis and discussion in Chapter IV related to the influence of Digital Organizational Culture and Employee Development Training on Employee Performance Productivity with *Employee Engagement* as a moderation variable in the General Section of the Jember Regency Regional Secretariat, several

conclusions can be drawn as follows:

1. Digital Organizational Culture does not have a positive and significant effect on Employee Performance Productivity. This is evidenced by a *p-value* of 0.481 (> 0.05). These findings show that the implementation of the current digital organizational culture has not been able to directly increase employee performance productivity.
2. Employee Development Training does not have a positive and significant effect on Employee Performance Productivity. This is indicated by a *p-value* of 0.232 (> 0.05). This means that the training provided has not directly had an impact on increasing employee work productivity.
3. Employee Engagement has been proven to moderate the relationship between Digital Organizational Culture and Employee Performance Productivity. A *p-value* of 0.031 (< 0.05) indicates that the role of moderation is significant. However, the moderation coefficient has a negative value (-0.298) which means that Employee Engagement weakens the influence of Digital Organizational Culture on employee performance productivity.
4. Employee Engagement has been shown to moderate the relationship between Employee Development Training and Employee Performance Productivity. A *p-value* of 0.007 (< 0.05) with a positive coefficient (0.383) shows that Employee Engagement strengthens the influence of training on employee performance productivity.
5. Overall, *Employee Engagement* has the strongest direct influence on Employee Performance Productivity compared to other variables. This shows that the level of employee attachment is a key factor in increasing work productivity within the Jember Regency Regional Secretariat.

Suggestions

Based on the results and limitations of the research, the suggestions that can be given are as follows:

1. For agencies, it is recommended to focus more on increasing *Employee Engagement* as the main strategy in increasing employee performance productivity.
2. For the next researcher, it is recommended to add other variables such as leadership, work motivation, job satisfaction, or work environment to get a more comprehensive picture.
3. Further research can be carried out on different objects and sectors so that the research results have a wider generalization power.

Thus, Chapter V is expected to provide a final overview of the research results and recommendations that are useful for the development of science and human resource management practices.

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