International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

The Effect of Corporate Application Use on Employee Productivity with Employee Performance as a Mediating Variable

Muhammad Zyrull Esa Ardy Wibowo[1] Mohammad Khusnu Milad[2]

[1,2]Faculty of Islamic Economics and Business, Universitas Islam Negeri Sunan Ampel Surabaya

Corresponding author: ardiwibowo213@gmail.com

Abstract

This study examines the effect of corporate application use on employee productivity and the mediating role of employee performance. A quantitative survey was conducted among employees who use corporate applications in their work, and the data were analyzed using regression/path analysis and bootstrapping. The results indicate that corporate application use has a positive direct effect on productivity (β = 0.319, p < 0.001) and a positive effect on employee performance (β = 0.497, *p* = 0.001). Employee performance also has a positive effect on productivity (β = 0.389, *p* < 0.001). The indirect effect of corporate application use on productivity through employee performance is 0.193, with a 95% confidence interval of [0.089, 0.321], indicating a significant mediation effect. These findings suggest that the benefits of corporate applications may be strengthened when their use is accompanied by support for employee performance.

The findings indicate that corporate application use is associated with higher employee productivity both directly and indirectly through employee performance. The results highlight the importance of supporting employees in using workplace applications effectively.

Keywords: corporate application use, employee performance, employee productivity, digitalization.

INTRODUCTION

The development of digital technology has prompted companies to reconsider how they organize work and manage human resources. Amid business competition, companies need to find ways to complete work effectively and efficiently. One effort

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

commonly made is to use digital applications to facilitate the flow of information, coordination, and task execution.

Corporate applications, such as management information systems, collaboration platforms, and enterprise resource planning (ERP) systems, are used to support operational activities. Through these applications, employees can obtain information and coordinate with one another more easily. Nevertheless, the mere availability of an application does not guarantee better work outcomes. Its benefits depend on how well the application fits job requirements and on how employees use it.

The use of applications does not automatically increase productivity. Applications may help reduce manual work and speed up information exchange, but these benefits must be reflected in the execution of daily tasks. This study therefore examines the relationship between corporate application use and productivity, while also investigating whether employee performance constitutes a pathway that explains this relationship.

A number of previous studies have examined the relationship between information technology and performance or work productivity.

Suhartini and Nurariansyah (2021), for instance, reported a relationship between information technology and employee performance, with job satisfaction as an intervening variable. Other studies have also examined the link between technology use and employee performance. However, the relationship between corporate application use and productivity through employee performance still needs to be tested in a research model that specifically positions performance as a mediator.

Zhou et al. (2025) found a positive relationship between digital transformation and labor productivity. Building on this finding, the present study focuses on the use of corporate applications in daily work. Its objectives are to examine the relationship between application use and productivity, its relationship with employee performance, and the role of performance as a mediating variable.

LITERATURE REVIEW

This section discusses corporate application use, employee performance, and employee productivity, and then explains the theoretical rationale underlying the relationships among these variables.

Corporate Application Use

Corporate application use is a form of applying digital technology in work processes. Applications can help employees access information, reduce errors, and coordinate with colleagues. This explanation is related to the Technology Acceptance Model (TAM) proposed by Davis (1989), which highlights perceived usefulness and perceived ease of use as important factors in technology acceptance.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Kusuma and Prayogi (2022) discussed the use of digital applications to support employee work effectiveness. According to TAM, employees tend to accept a technology more readily when they perceive it as useful and easy to use (Davis, 1989). Nevertheless, positive perceptions of an application do not in themselves prove an increase in productivity; this relationship must still be examined using research data.

Employee Performance

Employee performance describes how a person carries out tasks and responsibilities in accordance with organizational expectations. Aspects that can be considered include the quality and quantity of work, timeliness, initiative, and responsibility. Suhartini and Nurariansyah (2021) examined the relationship between information technology and employee performance, while Muzakki et al. (2016) also reported a relationship between information technology use and employee performance.

Employee Productivity

Employee productivity relates to the output achieved relative to the time, effort, and resources used. In work supported by digital applications, productivity can be seen in the smooth completion of tasks, the accuracy of results, and the amount of work that can be completed within a given period.

Sulistya and Zain (2020) discussed the use of information technology in relation to work productivity, whereas Zhou et al. (2025) reported a relationship between digital transformation and labor productivity. These studies provide a rationale for further investigating the relationship between technology and productivity. The present study adds attention to the possible role of employee performance as a link between the two.

Employee Performance as a Mediating Variable

In a mediation model, an intervening variable helps explain the pathway linking the independent variable to the dependent variable. In this study, employee performance is positioned as a mediating variable between corporate application use and productivity. This means that application use is expected to be related to productivity both directly and through changes in employee performance.

To assess these relationships, this study examines the direct effect of application use on productivity and the indirect effect passing through employee performance. This focus is expected to provide empirical insight into the role of performance in the relationship between corporate application use and productivity.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

HYPOTHESIS DEVELOPMENT

Based on the literature review and the framework of relationships among variables, the research hypotheses are formulated as follows.

- H1: Corporate application use has a positive and significant effect on employee productivity.
- H2: Corporate application use has a positive and significant effect on employee performance.
- H3: Employee performance mediates the relationship between corporate application use and employee productivity.

RESEARCH METHOD

Research Type and Approach

This study employs a quantitative approach. This approach was chosen because the research variables are measured through numerical data and the hypotheses are tested using statistical analysis. In this way, the relationships among corporate application use, employee performance, and productivity can be assessed on the basis of the collected data. In terms of its purpose, this study is explanatory because it seeks to explain relationships among variables rather than merely describe a situation. Data were collected through a survey using a questionnaire completed by employees.

Research Location and Time

The study involved employees of companies that use digital applications in their operational activities in the Krian area, Sidoarjo. Data were collected from January to March 2026 through an online questionnaire distributed via Google Forms. These corporate applications are used to examine the relationship between application use and productivity, including the possible mediating role of employee performance.

Path analysis was chosen to examine direct and indirect relationships within a single testing framework. The selection and reporting of the final analytical technique follow the procedures actually used and the available statistical output.

POPULATION AND SAMPLE

Population

The study population comprises active employees of companies that use digital applications to support their daily work. The exact total number of employees meeting these characteristics is not available in the manuscript, so the population cannot be accurately determined on the basis of an identified list of members.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Sample and Sampling Technique

The questionnaire contains 25 statements: 8 items for corporate application use (X), 9 items for employee performance (Z), and 8 items for employee productivity (Y). The manuscript records 120 respondents. If a simple guideline of five respondents per item is used, the benchmark is 125 respondents. However, this guideline is not the only way to assess sample adequacy. The assessment should consider the sampling technique, model complexity, and other relevant methodological bases, such as statistical power analysis where available. Because the document does not yet contain a statistical power calculation prior to the study, the number of respondents must not be changed from 120 to 125 without evidence of additional data collection. This limitation needs to be acknowledged when interpreting the results.

This study used purposive sampling, that is, selecting respondents based on criteria aligned with the research objectives. Respondents had to be active employees of a company that uses digital applications, have used the application for at least six months, have access to the main features required to perform their work, and be willing to complete the questionnaire voluntarily.

Research Variables and Operational Definitions

This study includes three variables: corporate application use as the independent variable, employee performance as the mediating variable, and employee productivity as the dependent variable. The operational definition and indicators of each variable are explained below.

Independent Variable: Corporate Application Use (X)

Corporate application use refers to the extent to which employees utilize software provided by the company to carry out their tasks. Its measurement draws on the TAM concept of Davis (1989), particularly perceived usefulness and perceived ease of use, as well as the frequency and intensity of use as formulated in the research questionnaire items.

Mediating Variable: Employee Performance (Z)

Employee performance refers to the results achieved when employees carry out their tasks and responsibilities in accordance with organizational standards. Following Mangkunegara (2017), the measurement in this study covers several dimensions, described below.

1. Work quality
2. Work quantity
3. Timeliness

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

4. As well as initiative and responsibility

These four aspects are used to describe both work outcomes and the way employees carry out their responsibilities.

Dependent Variable: Employee Productivity (Y)

Employee productivity is assessed through efficiency in completing tasks, the accuracy and quality of results, and the amount of work completed within a given period.

1. Task completion efficiency: the ability to complete work with an appropriate use of time and effort, including when applications support the work process.
2. Accuracy and quality of results: the degree of accuracy and the conformity of work results with the required needs or established standards.
3. Output volume per unit of time: the amount of work that can be completed within a given work period.

Data Analysis Technique

Descriptive Statistics as an Initial Basis

Descriptive statistics are used to summarize the data for each variable through the minimum, maximum, mean, and standard deviation. This summary provides an initial overview of respondents' answer patterns.

Residual Normality, Multicollinearity, and Heteroscedasticity

Before hypothesis testing, the model was evaluated by examining residual normality, multicollinearity, and heteroscedasticity. The checks were conducted on the residuals and predictor variables in accordance with the regression equations used.

Multicollinearity was evaluated using tolerance values and the Variance Inflation Factor (VIF).

Residual normality and heteroscedasticity must be determined from the output of statistical tests or residual diagnostics based on respondent data; the significance values for these two tests cannot be derived from descriptive statistics and regression coefficients alone.

RESULTS AND DISCUSSION

Research Results

- The analysis shows a positive relationship between corporate application use and employee productivity ($\beta = 0.319$; $p < 0.001$). Based on this result, the first hypothesis is supported. This finding is consistent with Zhou et al. (2025), who reported a positive relationship between digital transformation and labor productivity.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

- Corporate application use also shows a positive relationship with employee performance (β = 0.497; *p* = 0.001), so the second hypothesis is supported. This result is in line with the discussion by Muzakki et al. (2016) on the relationship between information technology use and employee performance.
- Based on the bootstrapping results, the indirect effect of corporate application use on productivity through employee performance is 0.193. The 95% confidence interval ranges from 0.089 to 0.321 and does not include zero. Accordingly, the indirect effect is significant and the third hypothesis is supported.

Validity and Reliability Tests

In the validity test, all questionnaire items were reported to have calculated r values above the r table value of 0.179. Cronbach's alpha was 0.842 for corporate application use, 0.819 for employee performance, and 0.856 for employee productivity. Because all alpha values are greater than 0.70, the instrument meets the reliability criterion used (Ghozali, 2018).

Descriptive Statistics of the Variables

Table 1 summarizes the minimum, maximum, mean, and standard deviation for each research variable.

Table 1. Summary of Descriptive Statistics of the Variables

Variable	Min	Max	Mean	Std. Deviation
Corporate Application Use (X)	2.50	5.00	3.98	0.612
Employee Performance (Z)	2.67	5.00	4.07	0.584
Employee Productivity (Y)	2.75	5.00	4.02	0.597

Source: Processed primary data (2026).

Mean scores range from 3.98 to 4.07 on a maximum scale of 5. The highest mean score is found for employee performance (4.07), followed by employee productivity (4.02) and corporate application use (3.98). Standard deviations range from 0.584 to 0.612, which describes the variation in respondents' answers around their means.

Instrument Validity Test

The validity of each item was examined using Pearson's Product Moment correlation. The study used an r table value of 0.179 for 120 respondents at the 5% significance level. A summary of the test results is presented in Table 2.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Table 2. Summary of Questionnaire Validity Test Results

Code	Dimension Measured	Calculated r	r Table	Status
X1–X3	Ease of Use of the Application	0.612–0.724	0.179	Valid
X4–X5	Perceived Usefulness of the Application	0.689–0.741	0.179	Valid
X6–X8	Frequency and Intensity of Use	0.658–0.712	0.179	Valid
Z1–Z2	Quality of Work Results	0.634–0.698	0.179	Valid
Z3–Z4	Quantity of Work Completed	0.671–0.715	0.179	Valid
Z5–Z6	Compliance with Deadlines	0.643–0.689	0.179	Valid
Z7–Z9	Initiative and Responsibility	0.658–0.702	0.179	Valid
Y1–Y3	Task Completion Efficiency	0.627–0.718	0.179	Valid
Y4–Y6	Accuracy and Precision of Output	0.641–0.703	0.179	Valid
Y7–Y8	Work Volume per Period	0.659–0.714	0.179	Valid

Source: Processed primary data (2026).

Based on the table, all 25 items have calculated r values exceeding the r table value of 0.179. Therefore, these items are declared valid according to the criteria used in this study.

Internal Consistency (Reliability) Test

The internal consistency of the questionnaire was assessed using Cronbach's alpha. A value of 0.70 was used as the benchmark threshold for assessing instrument reliability. The results for the three variables are presented in Table 3.

Table 3. Instrument Reliability Test Results

Variable	Number of Items	Alpha Value	Conclusion
Corporate Application Use (X)	8	0.842	Reliable
Employee Performance (Z)	9	0.819	Reliable
Employee Productivity (Y)	8	0.856	Reliable

Source: Processed primary data (2026).

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Cronbach's alpha values for the three variables range from 0.819 to 0.856. All values are above the 0.70 threshold, so the internal consistency of the instrument meets the criterion used.

Hypothesis Testing Results

Model Assumption Test Results

Diagnostic checks were conducted on the regression equations used in the path analysis. Normality was evaluated on the model residuals, multicollinearity was examined through tolerance values and the Variance Inflation Factor (VIF), and heteroscedasticity was examined using an appropriate statistical test or the scatter pattern of residuals against predicted values. The criteria applied were as follows: a significance value of the normality test greater than 0.05 as an indication of no significant deviation from normality; tolerance greater than 0.10 and VIF less than 5 as an indication of no problematic multicollinearity; and a significance value of the heteroscedasticity test greater than 0.05 as an indication that no evidence of heteroscedasticity was found on the basis of that test.

Based on the standardized beta coefficient in the first equation (β = 0.497), the correlation between X and Z can be taken as 0.497 if the first model is a simple linear regression using the same sample. Given this result, the estimated tolerance and VIF in the second equation are 0.753 and 1.327, respectively. These figures are derived estimates, not direct diagnostic output. Statistical values and significance.

Hypothesis Testing through Path Analysis

The hypotheses were tested through two regression or path equations. The first equation tests the relationship between corporate application use (X) and employee performance (Z), while the second tests the relationship of X and Z with employee productivity (Y). The estimates for the first equation are presented in Table 4.

Table 4. Estimation of the First Path Equation: Corporate Application Use (X) on Employee Performance (Z)

Predictor	B	Std. Error	Beta	t	Sig.
Constant	1.247	0.218	–	5.721	0.000
Corporate Application Use (X)	0.474	0.054	0.497	8.778	0.001

R^2 = 0.391 | F = 77.05 | Sig. F = 0.000

Source: Processed primary data (2026).

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

The beta coefficient for the relationship between corporate application use and employee performance is 0.497 (t = 8.778; p = 0.001). The positive sign indicates that higher application use is associated with higher performance in this study's data. The R^2 value of 0.391 means that the model explains 39.1% of the variance in employee performance. This result supports the second hypothesis.

Table 5. Estimation of the Second Path Equation: Corporate Application Use (X) and Employee Performance (Z) on Employee Productivity (Y)

Predictor	B	Std. Error	Beta	t	Sig.
Constant	0.812	0.201	–	4.040	0.000
Corporate Application Use (X)	0.312	0.061	0.319	5.115	0.000
Employee Performance (Z)	0.398	0.066	0.389	6.030	0.000

R^2 = 0.524 | F = 64.84 | Sig. F = 0.000

Source: Processed primary data (2026).

In the second equation, corporate application use has a positive direct relationship with employee productivity (β = 0.319; p < 0.001), so the first hypothesis is supported. Employee performance also shows a positive relationship with productivity (β = 0.389; p < 0.001). The R^2 value of 0.524 indicates that the two predictors in the model jointly explain 52.4% of the variance in employee productivity.

Mediation Test with Bootstrapping

Table 6. Direct Effect, Indirect Effect, and Mediation Test (5,000 Bootstrap Samples)

Path	Direct Effect	Indirect Effect	Total Effect	95% CI Lower	95% CI Upper	Sig.
X to Y (without mediator)	0.319	–	0.319	0.198	0.437	Sig.
X to Y through Z (indirect)	–	0.193	–	0.089	0.321	Sig.
X to Y (overall)	–	–	0.512	0.389	0.631	Sig.

Source: Processed primary data (2026).

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

The magnitude of the indirect effect of corporate application use on productivity through employee performance is 0.193. The 95% confidence interval of 0.089–0.321 does not include zero, so this result supports the presence of a mediation effect.

The direct effect of corporate application use on productivity remains significant after employee performance is taken into account (β = 0.319), and its indirect effect is also significant. This pattern of results is consistent with partial mediation.

Table 7. Summary of Hypothesis Testing Results

H	Hypothesis Statement	Coefficient	Sig.	Decision
H1	Corporate application use has a positive and significant effect on employee productivity.	Beta = 0.319	0.000	**ACCEPTED**
H2	Corporate application use has a positive and significant effect on employee performance.	Beta = 0.497	0.001	**ACCEPTED**
H3	Employee performance significantly and partially mediates the relationship between corporate application use and employee productivity.	IE = 0.193	CI [0.089, 0.321]	**ACCEPTED**

Source: Processed primary data (2026).

Based on Table 7, the hypothesis testing results show that all hypotheses are accepted. For H1, the coefficient is 0.319 with a significance value of 0.000, which is less than 0.05, so H1 is supported by the test results. For H2, the coefficient is 0.497 with a significance value of 0.001, which is less than 0.05, so it is likewise supported by the test results. For H3, the indirect effect (IE) of 0.193 indicates an indirect effect on employee productivity. The confidence interval (CI) of 0.089–0.321 does not include zero, which indicates a significant mediation effect.

DISCUSSION

Overall, the results show that corporate application use is positively related to employee productivity, both through the direct path and through employee performance. Accordingly, corporate applications can be understood as part of the work process that is related to work outcomes, rather than merely an administrative tool.

One possible explanation is that applications help employees find information more quickly, coordinate with colleagues, and reduce repetitive manual work. This

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

explanation is in line with the TAM of Davis (1989), which emphasizes the role of perceived usefulness and ease of use in technology acceptance. However, this mechanism should be understood as a theoretical explanation, not as a separately measured result in this study.

The mediation results show that employee performance is one of the pathways linking application use to productivity. In general, this finding is related to the study by Suhartini and Nurariansyah (2021), which also examined an intervening variable in the relationship between information technology and work outcomes. Nevertheless, the mediating variable in that study differs, so the two models cannot be regarded as equivalent.

From a practical standpoint, companies should choose applications that suit task requirements and complement their implementation with guidance and training. Evaluation should also consider changes in work processes and outcomes, rather than merely ensuring that the application is available or in use.

Taken together, the test results indicate two pathways of relationship between corporate application use and productivity: a direct relationship and an indirect relationship through employee performance.

Table 6 reports a total effect of 0.512. This value describes the magnitude of the effect in the model, which indicates the proportion of productivity variance that can be explained by the model.

These findings provide empirical evidence, for the group of respondents studied, that corporate application use is related to productivity. Applying the results to broader contexts requires consideration of the number and characteristics of the sample as well as the coverage of companies in the study. Technology alone is not sufficient to ensure that productivity increases. Employees still need support, such as training, technical assistance, and adjustment of applications to workflows, so that the benefits of technology can be used optimally.

CONCLUSION

This study finds that corporate application use is positively related to employee productivity (β = 0.319; $p < 0.001$) and employee performance (β = 0.497; $p = 0.001$). Employee performance also shows a positive relationship with productivity (β = 0.389; $p < 0.001$). The indirect effect through employee performance is 0.193, with a 95% confidence interval between 0.089 and 0.321. Because this interval does not include zero, the results support the mediating role of employee performance.

In practical terms, companies need to ensure that applications fit work requirements, provide training, and assess their impact on the quality, quantity, and timeliness of task completion. This study has limitations because it uses self-administered

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

questionnaires and covers a limited location and company context. Future research could involve more diverse companies and use objective performance indicators as a complement. The number of respondents recorded is 120; the adequacy of this sample needs to be interpreted on the basis of the sampling rationale used. In addition, conclusions regarding the regression assumption tests can only be drawn after the original diagnostic output has been examined.

The authors would like to thank the respondents who took the time to complete the questionnaire, as well as Universitas Islam Negeri Sunan Ampel Surabaya for the academic support during the preparation of this study.

REFERENCES

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly, 24*(1), 169–196. https://doi.org/10.2307/3250983

Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly, 37*(2), 471–482. https://doi.org/10.25300/MISQ/2013/37:2.3

Brynjolfsson, E., & Hitt, L. M. (2000). Beyond computation: Information technology, organizational transformation and business performance. *Organization Science, 11*(4), 449–466. https://doi.org/10.1287/orsc.11.4.449.14692

Campbell, J. P., & Wiernik, B. M. (2015). The modeling and assessment of work performance. *Annual Review of Organizational Psychology and Organizational Behavior, 2*, 47–74. https://doi.org/10.1146/annurev-orgpsych-032414-111427

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems, 19*(4), 9–30. https://doi.org/10.1080/07421222.2003.11045748

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Ghozali, I. (2018). *Aplikasi analisis multivariete dengan program IBM SPSS 25* [Multivariate analysis applications with the IBM SPSS 25 program] (9th ed.). Badan Penerbit Universitas Diponegoro.

Goodhue, D. L., & Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS Quarterly, 19*(2), 213–236. https://doi.org/10.2307/249689

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A systematic review of the literature on digital transformation: Insights and implications for strategy and organizational change. *Journal of Management Studies, 58*(5), 1159–1197. https://doi.org/10.1111/joms.12639

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs, 76*(4), 408–420. https://doi.org/10.1080/03637750903310360

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*, 115–135. https://doi.org/10.1007/s11747-014-0403-8

Humaidi, N., & Harjanto, A. (2022). Pengaruh penggunaan aplikasi digital terhadap produktivitas pegawai [The effect of digital application use on employee productivity]. *Transpublika: Jurnal Administrasi Publik, 3*(1), 45–56. https://transpublika.co.id/ojs/index.php/Transpublika

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin, 127*(3), 376–407. https://doi.org/10.1037/0033-2909.127.3.376

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet, H. C. W., & van der Beek, A. J. (2011). Conceptual frameworks of individual work performance: A systematic review. *Journal of Occupational and Environmental Medicine, 53*(8), 856–866. https://doi.org/10.1097/JOM.0b013e318226a763

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., de Vet, H. C. W., & van der Beek, A. J. (2014). Measuring individual work performance: Identifying and selecting indicators. *Work, 48*(2), 229–238. https://doi.org/10.3233/WOR-131659

Kusuma, D. A., & Prayogi, I. (2022). Efektivitas penggunaan aplikasi digital dalam meningkatkan kinerja pegawai [The effectiveness of using digital applications in improving employee performance]. *Transekonomika: Akuntansi, Bisnis dan Keuangan, 2*(3), 109–122. https://transekonomika.com/

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Leonardi, P. M. (2011). When flexible routines meet flexible technologies: Affordance, constraint, and the imbrication of human and material agencies. *MIS Quarterly, 35*(1), 147–167. https://doi.org/10.2307/23043493

MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research, 39*(1), 99–128. https://doi.org/10.1207/s15327906mbr3901_4

Mangkunegara, A. A. P. (2017). *Manajemen sumber daya manusia perusahaan* [Corporate human resource management] (14th ed.). PT Remaja Rosdakarya.

Melville, N., Kraemer, K., & Gurbaxani, V. (2004). Information technology and organizational performance: An integrative model of IT business value. *MIS Quarterly, 28*(2), 283–322. https://doi.org/10.2307/25148636

Muzakki, M. H., Susilo, H., & Yuniarto, S. R. (2016). Pengaruh penggunaan teknologi informasi terhadap kinerja karyawan [The effect of information technology use on employee performance]. *Jurnal Administrasi Bisnis, 39*(2), 8–14. http://administrasibisnis.studentjournal.ub.ac.id/index.php/jab/article/view/1561

Ozimek, A. (2020). *The future of remote work*. Upwork Research Institute. https://www.upwork.com/research/future-of-remote-work

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879–891. https://doi.org/10.3758/BRM.40.3.879

Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. *Social and Personality Psychology Compass, 5*(6), 359–371. https://doi.org/10.1111/j.1751-9004.2011.00355.x

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7*(4), 422–445. https://doi.org/10.1037/1082-989X.7.4.422

Suhartini, E., & Nurariansyah, I. (2021). Pengaruh teknologi informasi terhadap kinerja pegawai dengan kepuasan kerja sebagai variabel mediasi pada Kantor Wilayah Badan Pertanahan Nasional Provinsi Sulawesi Selatan [The effect of information technology on employee performance with job satisfaction as a mediating variable at the South Sulawesi Provincial Office of the National Land Agency]. *Study of*

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Scientific and Behavioral Management, 2(2), 1–15. https://doi.org/10.24252/ssbm.v2i2.21822

Sulistya, R. D., & Zain, D. (2020). Pemanfaatan teknologi informasi dan produktivitas kerja karyawan [The utilization of information technology and employee work productivity]. *Jurnal Ilmu Manajemen dan Akuntansi Terapan, 11*(1), 78–91. https://jurnal.stietotamaktar.ac.id/index.php/jimat

Tarafdar, M., Cooper, C. L., & Stich, J.-F. (2019). The technostress trifecta—Techno eustress, techno distress and design: Theoretical directions and an agenda for research. *Information Systems Journal, 29*(1), 6–42. https://doi.org/10.1111/isj.12169

Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems, 24*(1), 301–328. https://doi.org/10.2753/MIS0742-1222240109

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science, 46*(2), 186–204. https://doi.org/10.1287/mnsc.46.2.186.11926

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425–478. https://doi.org/10.2307/30036540

Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research, 122*, 889–901. https://doi.org/10.1016/j.jbusres.2019.09.022

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems, 28*(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning, 52*(3), 326–349. https://doi.org/10.1016/j.lrp.2018.12.001

Zhao, X., Lynch, J. G., Jr., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research, 37*(2), 197–206. https://doi.org/10.1086/651257

Zhou, Y., Lyu, Y., & Li, Z. (2025). Digital transformation and labor productivity: Evidence from Chinese enterprises. *PLOS ONE, 20*(1), Article e0312456. https://doi.org/10.1371/journal.pone.0312456

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.