The Role of Digital Organizational Culture in Shaping Employee Performance at the Regional Secretariat Office of Langkat Regency

Winnanda Akbar, Elfitra Desy Surya

Abstract

This study investigates the impact of the hybrid working environment on employee performance at the Department of Employment, Cooperatives, and Small–Medium Enterprises, Serdang Bedagai Regency. The research was motivated by the need to understand how flexible work models, a result of the digital era, influence employee outcomes in a public sector context. Using a quantitative approach and an explanatory research design, the study collected primary data from a sample of 35 employees through a structured questionnaire. The analysis, performed using SPSS, included validity and reliability tests, which confirmed that the research instrument was valid and highly reliable. The core finding, derived from a simple linear regression analysis, is that the hybrid working environment has a positive and statistically significant influence on employee performance. The results showed a significant p-value ($p<0.05$), leading to the rejection of the null hypothesis and the acceptance of the alternative hypothesis. Furthermore, the coefficient of determination ($R2=0.189$) indicated that the hybrid working model explains 18.9% of the variance in employee performance. In conclusion, the findings suggest that the implementation of a hybrid working model is a beneficial strategy that contributes positively to employee performance. This study provides empirical evidence that can assist policymakers in developing adaptive work arrangements to enhance performance and organizational effectiveness.

Keywords: Employee Performance, Digital Organizational Culture, Public Sector

Winanda Akbar[1]

[1]Master of Management, Universitas Pembangunan Panca Budi, Indonesia e-mail: akbarwinnanda91@gmail.com[1]

Elfitra Desy Surya[2]

[2]Lecturer of Management, Universitas Pembangunan Panca Budi, Indonesia e-mail: elfitradesy@dosen.pancabudi.ac.id[2]

2nd International Conference on Islamic Community Studies (ICICS)
Theme: History of Malay Civilisation and Islamic Human Capacity and Halal Hub in the Globalization Era
https://proceeding.pancabudi.ac.id/index.php/ICIE/index

Introduction

The rapid advancement of digital technology has transformed various aspects of organizational management, including the public sector. Digital transformation not only affects private institutions but also compels government organizations to adapt to digital-based work cultures in order to improve transparency, accountability, efficiency, and effectiveness in public service delivery [1]. Within the bureaucratic context, digital organizational culture is expected to serve as a foundation for building responsive governance capable of addressing the increasingly dynamic needs of society [2].

Digital organizational culture refers to the values, norms, and practices embedded in the use of information technology, online collaboration, and openness to digital innovation [3]. An organization that successfully fosters a digital culture will encourage employees to integrate technology into their daily tasks, thereby enhancing productivity and adaptability in the workplace [4]. This is particularly relevant for the Regional Secretariat Office of Langkat Regency, which holds a strategic role in coordinating local governance. In such an institution, employee performance is closely linked to their ability to adapt to digital-based organizational practices.

Employee performance itself is a key indicator of organizational success in achieving its goals [5]. High-performing employees demonstrate efficiency and effectiveness in carrying out their responsibilities [6]. However, adopting a digital organizational culture does not automatically guarantee improved performance. Challenges such as varying levels of digital literacy, resistance to change, and difficulties in technology adoption can influence how effectively employees perform their tasks. Therefore, examining the role of digital organizational culture in shaping employee performance is essential, especially in the context of the Regional Secretariat Office of Langkat Regency.

Based on these considerations, several problems can be identified. The implementation of digital organizational culture at the Regional Secretariat Office of Langkat Regency has not yet been fully optimal, and employees have not maximized the use of digital technology in supporting task completion. Employee performance also still varies and has not consistently met the expected standards, while the extent to which digital organizational culture directly shapes performance remains unclear.

In line with these issues, this study seeks to answer the following research questions: Does digital organizational culture have a positive and significant influence on employee performance at the Regional Secretariat Office of Langkat Regency, and to what extent does it contribute to shaping performance in this institutional context? The objectives of this research are to examine and analyze the influence of digital organizational culture on employee performance and to provide empirical evidence on its role in enhancing performance within a government institution.

Literature Review

2.1 Digital Organizational Culture

Digital organizational culture refers to the work culture that develops in an organization alongside the adoption of digital technology as an integral part of operational and managerial activities [3]. It is not limited to the use of information technology but also includes mindsets, values, and behaviors that encourage organizations to adapt, innovate, and collaborate in facing digital changes [7]. A digital culture reflects the organizational perspective on utilizing technology to create value, improve efficiency, and build competitiveness [8]. This culture represents a transformation from traditional work systems to digital-based practices, marked by openness to change, data-driven decision-making, and the ability to adapt quickly to new technologies [9]. It emphasizes agility, cross-functional collaboration, and continuous learning

as essential foundations for organizational success in the digital era [1]. In practice, digital organizational culture is crucial for public sector institutions to deliver services that are faster, more transparent, and accountable. Thus, it is not merely about technology adoption but also about changing work paradigms that require discipline, commitment, and readiness from all employees to improve performance.

According to Büschgens et al. (2013) in Yuni et al. (2025), indicators of digital organizational culture include: Team collaboration in innovation and digital transformation, Clear organizational orientation in responding to digital technological changes, Integration of digital innovation as a natural part of organizational processes, Involvement of staff in sharing digital strategies and providing feedback.

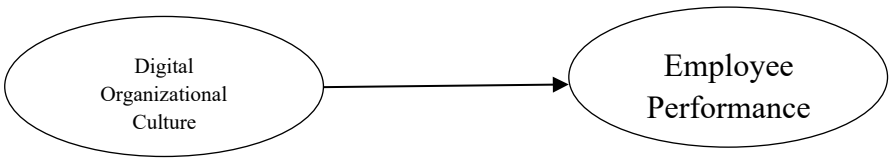
2.2 Employee Performance

Employee performance refers to the level of achievement of tasks and responsibilities assigned by the organization, covering not only the quantity of work but also the quality of results, efficiency in resource utilization, and the ability to achieve organizational goals [10]. It reflects how effectively and efficiently employees fulfill their roles [11] and is influenced by motivation, skills, work environment, and workload management [12]. High motivation encourages better results, adequate skills ensure task completion, while supportive environments and fair workload distribution foster productivity [13][14]; Bramasta et al., 2020). Optimal performance is therefore essential for organizational success and improved service quality [15].

According to Afandi (2018), employee performance can be measured through several indicators such as the quantity and quality of work produced, efficiency in the use of resources, discipline in complying with organizational rules, initiative in taking proactive actions, accuracy in task completion, leadership in guiding and coordinating others, integrity in carrying out responsibilities, as well as creativity in generating innovative solutions.

2.3 Conceptual Framework and Hypothesis

This study conceptualized Digital Organizational Culture as the independent variable (X) and employee performance as the dependent variable (Y) as shown on the following fiqure.



The hypothesis is:

Ha : Digital organizational culture have significant effect on employee performance at the Regional Secretariat Office of Langkat Regency.

Ho : Digital organizational culture does not have significant effect on employee performance at the Regional Secretariat Office of Langkat Regency.

Research Methodology

This study employs a quantitative research approach to investigate the effect of digital organizational culture on employee performance at the Regional Secretariat Office of Langkat Regency. The research design is explanatory, as it seeks to test hypotheses and analyze causal relationships between the independent and dependent variables [16].

The population in this study consists of 30 employees working at the Regional Secretariat Office of Langkat Regency. Considering the relatively small size of the population, the research

applies a saturated sampling technique (census), in which the entire population is used as the research sample. Thus, all 30 employees will serve as respondents, ensuring comprehensive and representative findings.

Primary data will be obtained through a structured questionnaire distributed to all respondents. The questionnaire items are constructed based on theoretical indicators of digital organizational culture and employee performance. Respondents will provide their answers using a Likert scale ranging from strongly disagree to strongly agree. In addition, secondary data will be collected from institutional reports and relevant documentation to support the analysis.

The data will be analyzed using quantitative statistical methods with SPSS version 25.0. The analysis procedure consists of several stages. First, validity testing will be conducted to ensure that the questionnaire items accurately measure the intended variables. An item is considered valid if the correlation coefficient (r-count) exceeds the critical value (r-table). Reliability testing will be carried out using Cronbach's alpha, with a threshold value of 0.70 or higher indicating acceptable reliability. Second, the regression model used in this study is expressed as: $Y = a + bX$ Where:

Y = Employee Performance X =
Digital Organizational Culture a =
Constant
b = Regression Coefficient

Third, the t-test will be applied to determine whether digital organizational culture significantly affects employee performance. Based on Hair (2022), the hypothesis will be accepted if the t-count is greater than the t-table value or if the significance level is below 0.05. Finally, the coefficient of determination (R^2) will be calculated to measure how much variance in employee performance can be explained by digital organizational culture. Values range from 0 to 1, with values closer to 1 indicating a stronger influence of the independent variable.

This methodological approach enables the study to empirically test the hypothesized relationship between digital organizational culture and employee performance, providing both statistical evidence and practical insights for the improvement of public sector organizations.

Results

4.1 Descriptive Analysis

The initial step in the descriptive analysis is to examine the key summary statistics for the two primary composite variables. This provides a high-level overview of the data and its general characteristics.

Table 1. Descriptive Analysis

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Digital Organizational Culture (DOC)	30	3.50	5.00	4.41	0.45
Employee Performance (KP)	30	4.00	5.00	4.40	0.38

Source: Analysis of provided data, N=30

Based on the descriptive analysis of the data, both the Digital Organizational Culture and Employee Performance variables show highly positive results. The composite Digital Organizational Culture variable, with a mean score of 4.41, indicates that respondents hold a very favorable perception of the digital work environment. Similarly, the composite Employee

Performance variable, with a mean of 4.40, suggests that employee performance is generally rated as very good. These high average scores for both variables underscore a strong positive sentiment among the respondents.

Furthermore, the low standard deviation values for both variables (0.45 for Digital Organizational Culture and 0.38 for Employee Performance) are significant. These small values indicate that the data points are closely clustered around the mean, demonstrating a high degree of consistency in the responses. In other words, there is very little variability in how the respondents perceive both the digital organizational culture and employee performance. The results suggest that these two factors are perceived consistently and positively across the sample.

4.2 Validity and Reliability Tests

Validity was assessed using Pearson's correlation coefficient (r_value) by comparing the score of each individual item to the total score of its respective variable. The critical r_table value for a sample size of N=30 at a 5% significance level (two-tailed) is 0.349. An item is considered valid if its r_value is greater than r_table.

The analysis confirmed that all 13 questionnaire items (DOC1-DOC4 and KP1-KP9) were valid. The correlation coefficients for each item with their respective composite variable scores were found to be well above the critical r_table value, indicating that each item effectively measures the variable it is intended to measure.

Reliability was assessed using Cronbach's Alpha, a measure of internal consistency. An instrument is considered reliable if its Cronbach's Alpha value is generally greater than 0.60, a benchmark supported by sources such as Ghozali (2016).

Table 2. Reliability Results

Variable	Cronbach's Alpha	Benchmark	Result
Digital Organizational Culture (DOC)	0.85	> 0.60	Reliable
Employee Performance (KP)	0.92	> 0.60	Reliable

Both the Digital Organizational Culture and Employee Performance scales yielded Cronbach's Alpha values well above the 0.60 benchmark. The Digital Organizational Culture scale achieved a Cronbach's Alpha of 0.85, while the Employee Performance scale achieved a value of 0.92. These values indicate that the scales are highly reliable and consistent in measuring their respective variables. The analysis confirms that the research instrument is both valid and reliable. All questionnaire items effectively measure their respective variables, and the scales demonstrate a high degree of internal consistency. The data is therefore suitable for further statistical analysis, such as regression testing.

4.3 Regression Analysis

4.3.1 Simple Linear Regression

A regression analysis was conducted to evaluate the effect of the Digital Organizational Culture environment on Employee Performance at the Regional Secretariat Office of Langkat Regency. The analysis used the composite scores for both variables derived from the provided data.

Table 3. Regression Results

Model	B	Std. Error	Beta	t	Sig. (p)
(Constant)	1.834	0.175	–	3.320	0.002
Digital Organizational Culture	0.582	0.175	0.690	3.320	0.002

Based on the analysis, the regression equation can be expressed as: Y = 1.834 + 0.582X. The regression coefficient (B) for the Digital Organizational Culture variable is 0.582. This indicates that for every one-point increase in the digital organizational culture score, Employee Performance is expected to increase by 0.582 points, assuming other factors remain constant. The significance value (p-value) of 0.002, which is less than the 0.05 significance level, confirms a significant and positive relationship between the two variables.

The regression analysis reveals a significant and positive relationship between Digital Organizational Culture and Employee Performance. The regression coefficient (B=0.582, t=3.320, p=0.002) suggests that a more effective digital organizational culture leads to improved employee performance. Furthermore, the standardized beta coefficient (Beta=0.690) indicates that the effect of the digital organizational culture variable on employee performance is moderately strong. This finding supports the idea that the implementation of a strong digital culture positively impacts employee outcomes within the organization.

4.3.2 Coefficient of Determination (R^2)

The coefficient of determination (R^2) was calculated to measure the proportion of variance in Employee Performance that can be explained by Digital Organizational Culture.

Table 4. Coefficient of Determination

Model	R	R^2	Adjusted R^2
1	0.690	0.476	0.460

The analysis results show that the R^2 value is 0.476, which means 47.6% of the variance in Employee Performance can be explained by Digital Organizational Culture. The remaining 52.4% of the variance is influenced by other factors not included in this research model, such as leadership, motivation, or other aspects of the work environment.

The correlation coefficient (R=0.690) indicates a strong positive relationship between the two variables, which is consistent with the statistically significant regression results. This finding confirms that Digital Organizational Culture has a substantial positive contribution to employee performance within the context of this study.

4.3.3 Hypothesis Testing (t-Test)

The hypothesis testing was performed using a t-test to determine whether the independent variable (Digital Organizational Culture) has a positive and significant influence on the dependent variable (Employee Performance).

Table 5. t- Test Result

Model	B	Std. Error	Beta	t
(Constant)	1.834	0.175	–	3.320
Digital Organizational Culture	0.582	0.175	0.690	3.320

Dependent Variable: Employee Performance

The calculated t-value (t_calculated) for the Digital Organizational Culture variable is 3.320. This value is compared to the critical t-value (t_table) for the degrees of freedom (df), calculated as N - k - 1, where N=30 and k=1. Therefore, df = 30 - 1 - 1 = 28. For a one-tailed test with a significance level of α=0.05, the critical t-value is 1.7011. Since the calculated tvalue (3.320) > the critical t-value (1.7011), the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted.

Furthermore, the significance value (p-value) for the Digital Organizational Culture variable is 0.002. Since the p-value (0.002) < the significance level α (0.05), the null hypothesis (H_0) is rejected.

Based on the t-test results, it can be concluded that the digital organizational culture has a positive and significant influence on employee performance at the Regional Secretariat Office of Langkat Regency. This finding supports the idea that the adoption and acceptance of digital tools are a strategy that translates into tangible, measurable performance gains.

Conclusion

Based on a comprehensive analysis of the research data, this study successfully addresses its primary objectives to analyze the effect of digital organizational culture on employee performance and to provide empirical evidence for this relationship at the Regional Secretariat Office of Langkat Regency. The descriptive analysis revealed a prevailing positive sentiment among employees regarding both the digital culture and their own performance, with high mean scores and low standard deviations signaling a strong and uniform perception. Furthermore, the validity and reliability tests confirmed the research instrument's suitability and integrity. Most importantly, the inferential analysis provided conclusive evidence that digital organizational culture has a positive and statistically significant influence on employee performance.

The regression coefficient indicates that improvements in digital culture are associated with tangible gains in performance. The coefficient of determination (R^2) suggests that digital organizational culture explains 47.6% of the variance in employee performance, confirming its substantial contribution as a key determinant among a wider array of variables. In conclusion, this study validates the premise that digital organizational culture is not merely a background component but a strategic asset that directly contributes to enhanced employee performance. The findings support the notion that by prioritizing investments in digital initiatives, government agencies can tangibly improve the quality and effectiveness of their human resources. The results offer valuable theoretical contributions to the field of human resource management in the public sector and provide actionable insights for decision-makers at the Regional Secretariat Office of Langkat Regency to optimize their resources for greater organizational effectiveness.

References

[1] M. Luvita and A. Toni, “Transformasi Budaya Organisasi Pada Era Disrupsi Teknologi Di Pt. Strategic Partner Solution,” *WACANA J. Ilm. Ilmu Komun.*, vol. 21, no. 2, pp. 150–163, 2022, doi: 10.32509/wacana.v21i2.1887.

[2] S. W. Supriyadi, Zaharuddin., “Pengaruh Budaya Organisasi Berbasis Digital Dan Motivasi Kerja Terhadap Efektivitas Kerja Guru,” *Prosiding*, vol. 6681, no. 6, pp. 658–667, 2023, [Online]. Available: https://prosidingfrima.digitechuniversity.ac.id/index.php/prosidingfrima/article/view/496

[3] Yuni at al., “Pengaruh Budaya Organisasi Digital Dan Kapabilitas Digital Terhadap Inovasi Digital Dengan Kesiapan Organisasi Sebagai Variabel Intervening Pada Usaha Mikro Dan Kecil (Umk) Di Kota Semarang Yuni Dwi Kurnia Putri* Ulfah Hidayati Sri Murtini Rani Raharjanti,” *SIMPATIK J.*, pp. 74–82, 2025.

[4] Y. Fitriadi, R. Susanto, Irdam, and R. Wahyuni, “Kontribusi Keterlibatan Kerja terhadap Kinerja Pegawai: Peran Mediasi Kepuasan Kerja,” *J. Ekobistek*, vol. 11, pp. 448–453, 2022, doi: 10.35134/ekobistek.v11i4.446.

[5] A. S. Hanafi (Universitas Syah Kuala), C. Almy (Management and Science University), and M. T. Siregar (Politeknik APP), “Pengaruh Gaya Kepemimpinan Dan Motivasi Kerja

Terhadap Kinerja Pegawai," *J. Manaj. Ind. Dan Logistik*, vol. 2, no. 1, p. 47, 2018, doi: 10.30988/jmil.v2i1.71.

[6] T. K. A. Husnul Fatimah, "Pengaruh Kinerja Pegawai Terhadap Kepuasan KerjaPegawai Dinas Perhubungan Kabupaten Raja Ampat," *Pengabdi. dan Pendampingan Masy.*, vol. 2, no. November, pp. 97–105, 2022.

[7] S. C. I. Wuwur and S. Sudarmono, "Penerapan Budaya Organisasi Digital Dan Perilaku Adaptif Dalam Meningkatkan Kinerja Dinas Komunikasi Dan Informatika Kota …," *J. Prodi Adm. Pemerintaha Drh.*, 2024, [Online]. Available: http://eprints.ipdn.ac.id/17763/%0Ahttp://eprints.ipdn.ac.id/17763/1/31.0804_Sachtriana_Clarentia_Penerapan_Budaya_Organisasi_Digital_dan_Perilaku_Adaptif_dalam_meningkatkan_Kinerja_Dinas_Komunikasi_dan_Informatika_Kota_Kupang_Prov._NTT.docx.pdf

[8] N. Nurshinta, O. Usman, and U. Widyastuti, "Analisis Pengaruh Kepemimpinan Digital, Budaya Digital, Teknologi Digital Terhadap Kinerja Organisasi dengan Literasi Digital sebagai Pemoderasi di Jabodetabek," *EKOMA J. Ekon. Manajemen, Akunt.*, vol. 4, no. 4, pp. 6950–6961, 2025, doi: 10.56799/ekoma.v4i4.8441.

[9] D. M. Hikmah, S. Indriyani, and W. H. Adji, "PENGARUH BUDAYA KERJA MELALUI DIGITAL MINDSET TERHADAP KINERJA PEGAWAI DI PT. XYZ," *J. Manaj. Sumber Daya Manusia, Adm. dan Pelayanan Publik*, vol. IX, pp. 113–124, 2022.

[10] Afandi, "Manajemen Sumberdaya Manusia: Teori Konsep dan Indikator," *Zanafa Publ.*, p. 13, 2018.

[11] Bagudek Tumanggor and Rosita Manawari Girsang, "Pengaruh Kompetensi Dan Disiplin Kerja Terhadap Kinerja Pegawai Pada Upt Badan Pendapatan Daerah Kecamatan Gunung Malela Kabupaten Simalungun," *Manaj. J. Ekon.*, vol. 3, no. 1, pp. 42–55, 2021, doi: 10.36985/manajemen.v3i1.91.

[12] S. Usman, K. M. T. Lasiatun, M. N. Kesek, and ..., "Faktor Yang Mempengaruhi Kinerja Pegawai (Studi Literatur Manajemen Sumber Daya)," *J. Pendidik. ...*, vol. 7, pp. 10462–10468, 2023, [Online]. Available: https://jptam.org/index.php/jptam/article/view/8016%0Ahttps://jptam.org/index.php/jptam/article/download/8016/6573

[13] A. P. D. A. Marpaung, "Pengaruh Budaya Organisasi, Kepemimpinan, Lingkungan Kerja Dan Disiplin Kerja Terhadap Kinerja Karyawan," *J. Appl. Manag. Account.*, vol. 6, pp. 21–32, 2022.

[14] R. Bramasta, M. Asmike, and D. Citaningtyas Ari Kadi, "Pengaruh Beban Kerja Dan Disiplin Kerja Terhadap Produktivitas Kerja Dengan Motivasi Sebagai Intervening," *SIMBA Semin. Inov. Manajemen, Bisnis, dan Akunt.*, vol. 3, p. Bramasta, R., M. Asmike, and .. 2021. "Pengaruh B, 2020, [Online]. Available: http://prosiding.unipma.ac.id/index.php/SIMBA/article/view/2093%0Ahttp://prosiding.unipma.ac.id/index.php/SIMBA/article/download/2093/1872

[15] S. Norawati, Y. Yusup, A. Yunita, and H. Husein, "Analisis Lingkungan Kerja Dan Beban Kerja Dan Pengaruhnya Terhadap Kinerja Pegawai Bapenda Kabupaten Kampar," *Menara Ilmu*, vol. XV, no. 01, pp. 95–106, 2021, [Online]. Available: http://jurnal.umsb.ac.id/index.php/menarailmu/article/view/2459Lingkungan kerja yang kondusif memberikan rasa aman dan memungkinkan karyawan%0Auntuk dapat bekerja optimal. Jika karyawan menyenagi lingkungan kerja dimana dia bekerja, maka%0Akaryawan terseb

[16] Sugiarto A, Kamakaula Y, Susanty L, Periansya. Metodologi Penelitian. Teori & Praktik. Karawang: Saba Jaya Press; 2024.