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 Remote Working On Productivity And Work-Life Balance With Employee Engagement As A Mediating Variable Among Millennial Employees In D.I. Yogyakarta

Nukadea Septia Agung[1], Andriyastuti Suratman[2]

[1,2]Universitas Islam Indonesia

Corresponding Author: Nukadea Septia Agung 21311050@students.uii.ac.id

Abstract

The The development of digital technology has driven changes in organizational work patterns through the implementation of remote working, particularly among millennial employees who prioritize flexibility and work–life balance. However, empirical findings regarding the impact of remote working on employee productivity and work–life balance remain inconsistent. Therefore, this study aims to examine the effect of remote working on employee productivity and work–life balance with employee engagement as a mediating variable among millennial employees in the Special Region of Yogyakarta. This study employs a quantitative approach using a survey method. Data were collected through an online questionnaire utilizing a five-point Likert scale and analyzed using statistical analysis techniques. The respondents consist of millennial employees who implement a remote working system in the Special Region of Yogyakarta. The results indicate that remote working has a positive effect on employee engagement. Furthermore, employee engagement positively influences employee productivity and work–life balance and serves as a mediating variable that strengthens the relationship between remote working and both outcomes. These findings suggest that the effectiveness of remote working largely depends on the level of employee engagement

Keywords: Remote Working, Employee Productivity, Employee Engagement, Work Life Balance, Milenials

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

INTRODUCTION

The development of digital technology has transformed organizational work systems from traditional office-based models to more flexible arrangements. One of the most widely adopted systems is remote working, which allows employees to perform their tasks outside the office using digital communication tools. This work model has become increasingly popular, especially among millennial employees who value flexibility and autonomy.

Thus, in the context of organizations, employee productivity remains one of the company's main objectives (Baliling, 2025). Expectations of productivity are not only based on the quantity of input but also the quality of output, time efficiency, and employees' ability to adapt to dynamic work targets (Calista, 2024). Flexible work models such as remote work are often considered to improve productivity by reducing commuting time and increasing work autonomy, although actual results are not always consistent (Dutta, 2025). In the long term, this can strengthen the stability and overall performance of the organization (Wijayanto et al, 2022). Employees with a high level of engagement tend to demonstrate better performance and are more capable of managing work demands effectively within a remote working system (Hafshah, 2022).

Previous studies have shown that remote working can influence employee productivity. (Monteiro, 2019) and (Dutt et al, 2024) found that teleworking has a positive effect on firm productivity. Similarly, (Anand, 2021) reported that remote working improved employee efficiency during the pandemic period. (Bal & Bulgur, 2023) also stated that remote working arrangements affect employee performance depending on organizational structure and support.

In addition to productivity, remote working is closely related to work-life balance. (Rañeses, 2022) explained that remote work can enhance work-life balance when implemented effectively. (Rustan et al, 2024) emphasized that remote working contributes to employee well-being through better balance between professional and personal life. Furthermore, (Putra et al, 2020) found that work-life balance positively affects job satisfaction among millennial employees. The findings confirm that the effectiveness of remote work heavily depends on employees' psychological conditions and well-being (Rizqa Nadhifa, 2022).

However, the impact of remote working may not occur directly. Employee engagement plays an important role in determining work outcomes. (Fauzya & Chaniago, 2022) found that employee engagement significantly improves employee performance. WLB is the individual's ability to balance the demands of work with the

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

demands of personal life fairly, thereby reducing role conflict and improving employee well-being (Galanti, 2021). (Malasari, 2022) also showed that employee engagement positively influences work-life balance among employees who implement work-from-home systems. In addition, (Nuraliza, 2023) highlighted that organizational factors can strengthen employee engagement.

Based on these findings, employee engagement may function as a mediating variable in the relationship between remote working, productivity, and work-life balance. However, studies examining these relationships simultaneously among millennial employees in D.I. Yogyakarta remain limited. Therefore, this study aims to analyze the effect of remote working on productivity and work-life balance with employee engagement as a mediating variable.

THEORETICAL REVIEW

Self-Efficacy

Self-efficacy is an individual's belief about the extent to which they are capable of performing a behavior in a certain situation. When someone has positive self-efficacy, they believe that they are capable of performing the expected behavior. Conversely, negative self-efficacy makes individuals tend to be reluctant to try a behavior (Rachmawati, D., 2023)

Self-efficacy is characterized by three indicators by (Agustin et al, 2021):

1. Level
2. Strength
3. Generalization

Research has consistently shown a positive and significant relationship between self-efficacy and work readiness. For instance, (Nasution et al, 2022) found that self-efficacy positively influenced locus of control among university students during the COVID-19 pandemic. Similarly, (Puspitasari, 2024) reported that self-efficacy significantly predicted work readiness among vocational school students, with findings indicating that individuals with higher self-efficacy were better prepared to face workplace challenges.

Remote Working

Remote working is a work pattern carried out from a location other than the main office, but still adheres to the organization's work structure and rules (Roberto et al., 2023). Bal and Bulgur (2023) stated that there are several indicators that show how remote working is implemented :

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

1. Home-based remote working
2. Center-based remote working
3. Mobile telework

(Anggraini et al., 2024) reinforces the finding that meaningful work plays a crucial role in the context of remote work. Empirically, the analysis results show that the meaningfulness of work is positively and significantly correlated with work engagement among remote employees, with a contribution magnitude of 55.7% (R^2 = 0.557). This indicates that employees' perception of the value and purpose of their work is a key determinant in maintaining their engagement in a virtual work environment.

Employee Productivity

The key to operational effectiveness lies in employee productivity, which is defined as the level of efficiency in completing tasks within a certain timeframe. (Singh & Chaudhary, 2022) explain that high productivity means tasks are completed effectively and efficiently, while low productivity, on the other hand, prolongs work duration and can potentially trigger additional costs.

Employee productivity is an indicator built on several key dimensions that serve as measures of performance and work effectiveness. These main dimensions include:

1. Output Quantity
2. Output Quality
3. Time Efficiency
4. Resource Utilization
5. Innovation and Process Improvement

The results of the empirical study conducted by (Utoyo, 2025) at PT. Kanaan Jaya Perkasa Kupang demonstrated a positive and significant relationship between Employee Engagement and Employee Performance. The validity of this finding was reinforced through a simple linear regression test, where the t-value (4.391) far exceeded the t-table value (2.024), concluding that employee engagement is a key factor that effectively drives work performance.

Work Life Balance

Work-life balance is defined as a condition that emphasizes the importance of a proportionate involvement and equal level of satisfaction in various aspects of an individual's life. This concept is crucial because it significantly contributes to minimizing conflicts that occur between professional responsibilities and personal life (Rañeses, 2022)

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

Balance is actually achieved when individuals feel effective and satisfied in carrying out each of their roles, even though there are periods when one aspect must be prioritized more dominantly (Jex et al, 2024)

1. Time Balance:
2. Involvement Balance:
3. Satisfaction Balance:

Based on the research conducted by (Wijayanto et al, 2022) it was found that Work-Life Balance has a positive and significant effect on Employee Engagement. This effect is evidenced by a positive Path Coefficient of 0.351 and a T-Statistic value of 4.464. These figures empirically indicate that the better the Work-Life Balance of Generation Y employees, the greater their level of engagement at work.

METHODOLOGY

This study used a quantitative research approach to examine the relationships between remote working, employee engagement, productivity, and work-life balance. The quantitative method was chosen to test hypotheses and analyze causal relationships between variables using statistical procedures. Data were collected through a structured questionnaire distributed to millennial employees in D.I. Yogyakarta who were implementing remote working systems. A purposive sampling technique was used to select respondents based on specific criteria, namely millennial employees who were actively working and experiencing remote working arrangements. The questionnaire used a Likert scale to measure respondents' perceptions of each variable.

The independent variable in this study was Remote Working (X), while Employee Engagement (Z) served as a mediating variable. The dependent variables were Productivity (Y1) and Work-Life Balance (Y2). Remote working refers to a flexible work system that allows employees to perform tasks outside the traditional office environment using digital technology (Monteiro, 2019). Employee engagement reflects employees' emotional attachment and commitment to their organization, which influences work outcomes (Fauzya & Chaniago, 2022). Productivity represents employees' ability to complete work effectively and efficiently (Anand, 2021). Work-life balance refers to the balance between professional responsibilities and personal life (Putra et al, 2020). Data analysis was conducted using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach through SmartPLS software.

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

The analysis included evaluation of the outer model (validity and reliability testing), inner model (structural model evaluation), path coefficient testing, mediation testing, and predictive relevance (Q-Square).

RESULTS

Descriptive Analysis

This study conducted a descriptive analysis of the respondents' demographic characteristics, including gender, age range, university of origin, and residence. The analysis aims to provide a comprehensive overview of the respondents' profiles so that their suitability with the research target population can be assessed (Badar & Lasthuizen, 2023). This study involved 210 respondents who are millennial employees working in the Special Region of Yogyakarta. The respondents were selected according to the research criteria, namely employees who implement a remote working system, either fully or partially (hybrid).

Descriptive Analysis of Respondent Identity Results

Table 1. Characteristics of Respondents Based on Gender

Jenis Kelamin	Jumlah	Persen
Laki-laki	88	41,9 %
Perempuan	122	58,1 %
Total	210	100%

Source: Primary data processed, 2026

Based on the information in Table 1 and considering gender, of the 210 people surveyed in this study, 88 people, or 41.9%, were male and 122 people, or 58.1%, were female. These results indicate that the majority are dominated by female employees.

Table 2. Respondent Characteristics Based on Age

Jenis Kelamin	Jumlah	Persen
29 -33 Tahun	120	57,1 %
34-38 Tahun	73	34,8 %
39-43 Tahun	17	8,1 %
Total	210	100%

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

Source: Primary data processed, 2026

Based on age, students aged 29-33 years are 120 people, accounting for 57.1%, the age category 35-38 years consists of 37 people with a percentage of 34.8%, and those aged 39-43 years make up 8.1%. From these results, the majority are dominated by employees aged 29-33 years.

Measurement Model

Analysis The measurement model was assessed using Structural Equation Modeling (SEM) with SmartPLS 4.0. The following sub-sections detail the validity and reliability tests.

Convergent Validity

Convergent validity was evaluated using outer loadings and Average Variance Extracted (AVE). All indicators met the criteria of outer loadings > 0.7 and AVE > 0.5, confirming valid measurement.

Table 3. Outer Loading Results

Variabel	Indikator	Z	Y2	X	Y2	Keterangan
Employee Engagement	**EE1**	0,745				**Valid**
	EE2	0,759				**Valid**
	EE3	0,780				**Valid**
	EE4	0,743				**Valid**
	EE5	0,794				**Valid**
	EE6	0,821				**Valid**
	EE7	0,784				**Valid**
	EE8	0,791				**Valid**
	EE9	0,801				**Valid**
	PK1		0,823			**Valid**
	PK2		0,827			**Valid**

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

Produktivitas Karyawan	**PK3**		0,777			**Valid**
	PK4		0,833			**Valid**
	PK5		0,745			**Valid**
Remote Working	**RW1**			0,789		**Valid**
	RW2			0,809		**Valid**
	RW3			0,818		**Valid**
	RW4			0,792		**Valid**
	RW5			0,820		**Valid**
	RW6			0,792		**Valid**
	RW7			0,794		**Valid**
	RW8			0,817		**Valid**
Word Life Balance	**WLB1**				0,816	**Valid**
	WLB2				0,764	**Valid**
	WLB3				0,813	**Valid**
	WLB4				0,781	**Valid**
	WLB5				0,771	**Valid**
	WLB6				0,800	**Valid**
	WLB7				0,824	**Valid**
	WLB8				0,805	**Valid**

Source: Primary data processed, 2025

Table 4. Result Ave

Variabel	AVE	Keterangan
Z	0.609	**Valid**

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

Y1	0.643	**Valid**
X	0.646	**Valid**
Y2	0.636	**Valid**

Source: Primary data processed, 2025

Table 4 shows that each variable has an AVE value >0.50, indicating that the latent variables explain on average half of the variance of the indicators. In addition, the outer loading values are >0.70, indicating a high correlation for the construct measures. Therefore, it can be said that the indicators of each variable are reliable.

Discriminant Validity

Discriminant validity was assessed using Fornell-Larcker criteria and cross-loadings. Results confirmed that each construct was distinct from others.

Table 5. Discriminant Validity Test Results (Cross Loading)

Variabel	Indikator	Z	Y2	X	Y2	Keterangan
Employee Engagement	**EE1**	0,745	0,563	0,597	0,571	Valid
	EE2	0,759	0,525	0,539	0,547	Valid
	EE3	0,780	0,606	0,572	0,569	Valid
	EE4	0,743	0,566	0,551	0,571	Valid
	EE5	0,794	0,589	0,643	0,619	Valid
	EE6	0,821	0,643	0,580	0,537	Valid
	EE7	0,784	0,585	0,572	0,550	Valid
	EE8	0,791	0,595	0,561	0,530	Valid
	EE9	0,801	0,613	0,589	0,581	Valid
Produktivitas Karyawan	**PK1**	0,594	0,823	0,543	0,545	Valid
	PK2	0,658	0,827	0,613	0,593	Valid
	PK3	0,561	0,777	0,495	0,477	Valid
	PK4	0,646	0,833	0,615	0,538	Valid
	PK5	0,552	0,745	0,492	0,468	Valid

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

Remote Working	**RW1**	0,634	0,531	0,789	0,561	Valid
	RW2	0,529	0,496	0,809	0,560	Valid
	RW3	0,586	0,588	0,818	0,634	Valid
	RW4	0,574	0,564	0,792	0,574	Valid
	RW5	0,597	0,521	0,820	0,648	Valid
	RW6	0,652	0,584	0,792	0,602	Valid
	RW7	0,551	0,555	0,794	0,625	Valid
	RW8	0,629	0,598	0,817	0,604	Valid
Word Life Balance	**WLB1**	0,579	0,568	0,672	0,816	Valid
	WLB2	0,550	0,537	0,525	0,764	Valid
	WLB3	0,597	0,542	0,633	0,813	Valid
	WLB4	0,547	0,487	0,579	0,781	Valid
	WLB5	0,553	0,496	0,557	0,771	Valid
	WLB6	0,603	0,516	0,611	0,800	Valid
	WLB7	0,590	0,525	0,588	0,824	Valid
	WLB8	0,592	0,516	0,600	0,805	Valid

Source: Primary data processed, 2025

Cross-loadings also indicated that each indicator loaded highest on its intended construct.

Reliability

Reliability was assessed using Composite Reliability (CR) and Cronbach's Alpha. All constructs demonstrated acceptable reliability (CR > 0.7 and Cronbach's Alpha > 0.7).

Table 6. Reliability Test Results (Composite Reliability)

Variabel	*Cronbach's*	*Composite*	Keterangan

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

	alpha	*reliability*	
Employee Engagement	0.919	0.920	**Reliabel**
Produktivitas Karyawan	0.861	0.865	**Reliabel**
Remote Working	0.922	0.923	**Reliabel**
Word Life Balance	0.918	0.919	**Reliabel**

Source: Primary data processed, 2025

Structural Model Analysis

The structural model examined the relationships between self-efficacy, locus of control, social support, and work readiness.

R-Square

Table 7. R-Square Test Results

Variabel	R- Square	R-square adjusted	Klasifikasi
Employee Engagement	0,552	0,549	**Memadai**
Produktivitas Karyawan	0,568	0,566	**Memadai**
Work Life Balance	0,524	0,521	**Memadai**

Source: Primary data processed, 2025

The R2 value of the Employee Engagement variable (R-Square) is 0.549, or 54.9%, according to table 4.15, which indicates that it is considered Adequate. The R2 (R-Square) value of the Employee Productivity variable is 0.566, or 56.6%, indicating an adequate value. And the R2 value of the Work Life Balance variable is 0.521, or 52.1%, indicating an adequate value. These values indicate that the Remote Working and Employee Engagement variables can explain the Employee Productivity and Work Life Balance variables.

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

Multicollinearity Test (VIF)

Variance Inflation Factor (VIF) values for all independent variables were below 5, confirming no multicollinearity issues.

Table 8. VIF Results (Inner Model)

	VIF	Keterangan
EE1	2,002	**Tidak ada Multikoliniertas**
EE2	2,008	**Tidak ada Multikoliniertas**
EE3	2,154	**Tidak ada Multikoliniertas**
EE4	1,879	**Tidak ada Multikoliniertas**
EE5	2,229	**Tidak ada Multikoliniertas**
EE6	2,529	**Tidak ada Multikoliniertas**
EE7	2,166	**Tidak ada Multikoliniertas**
EE8	2,338	**Tidak ada Multikoliniertas**
EE9	2,343	**Tidak ada Multikoliniertas**
PK1	2,086	**Tidak ada Multikoliniertas**
PK2	1,995	**Tidak ada Multikoliniertas**
PK3	1,770	**Tidak ada Multikoliniertas**
PK4	2,121	**Tidak ada Multikoliniertas**
PK5	1,611	**Tidak ada Multikoliniertas**
RW1	2,058	**Tidak ada Multikoliniertas**
RW2	2,336	**Tidak ada Multikoliniertas**
RW3	2,394	**Tidak ada Multikoliniertas**
RW4	2,174	**Tidak ada Multikoliniertas**
RW5	2,461	**Tidak ada Multikoliniertas**
RW6	2,075	**Tidak ada Multikoliniertas**
RW7	2,229	**Tidak ada Multikoliniertas**
RW8	2,438	**Tidak ada Multikoliniertas**
WLB1	2,460	**Tidak ada Multikoliniertas**
WLB2	1,993	**Tidak ada Multikoliniertas**
WLB3	2,492	**Tidak ada Multikoliniertas**
WLB4	2,120	**Tidak ada Multikoliniertas**

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

WLB5	2,058	**Tidak ada Multikoliniertas**
WLB6	2,194	**Tidak ada Multikoliniertas**
WLB7	2,507	**Tidak ada Multikoliniertas**
WLB8	2,497	**Tidak ada Multikoliniertas**

Source: Primary data processed, 2025

The construct measurement is considered reliable because Table 8 shows that ≤ 3.3 VIF values are within the safe limit, indicating that the model is free from multicollinearity issues.

Q-Square

Table 9. Q-Square Results

Variabel	Q-Square	Keterangan
Employee Engagement	0,326	**Memadai**
Produktivitas Karyawan	0,351	**Tinggi**
Work Life Balance	0,325	**Memadai**

Source: Primary data processed, 2025

Table 9 shows that the Q-Square value above zero indicates that the model has adequate predictive power. A Q-Square value exceeding 0.35 indicates a high level of predictive relevance.

Hypothesis Testing

Hypotheses were tested using path coefficients and significance levels. All hypotheses were supported.

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 10. Direct Effect Test Results (Path Coefficient)

Variabel	Original sample (O)	Sample mean (M)	Standard deviatio n (STDEV)	T statistics (|O/STDEV |)	P values
Employee Engagement -> Produktivitas Karyawan	0,754	0,748	0,055	13,798	0,000
Employee Engagement -> Work-Life Balance	0,724	0,719	0,066	11,011	0,000
Remote Working -> Employee Engagement	0,743	0,741	0,052	14,156	0,000

Source: Primary data processed, 2025

Table 11. Indirect Effect Test Results (Path Coefficient)

Variabel	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Remote Working -> Employee Engagement -> Produktivitas Karyawan	0,560	0,557	0,075	7,454	0,000
Remote -> WorkingEmployee Engagement -> Work-Life Balance	0,537	0,536	0,082	6,531	0,000

Source: Primary data processed, 2025

DISCUSSION

The Impact of Remote Working on Employee Engagement

The analysis results showed a coefficient value of 0.743, with a T-statistics of 14.156 and a P-value of 0.000. Thus, Remote Working has a positive and significant effect on Employee Engagement.

This means that the implementation of a remote work system can enhance employees' attachment to the organization. Flexibility in time and workplace provides

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

greater comfort and autonomy, which ultimately increases motivation and work commitment among millennial employees.

The Effect of Employee Engagement on Employee Productivity

Based on the results of the direct relationship test, the path coefficient (Original Sample) value was 0.754, with a T-statistics value of 13.798 and a P- value of 0.000 (< 0.05). These results indicate that Employee Engagement has a positive and significant effect on Employee Productivity.

This means that the higher the level of employee engagement with their work and organization, the higher the productivity produced. Among millennial employees in D.I Yogyakarta, emotional involvement and commitment to work are important factors in improving performance. Employees who feel engaged tend to be more focused, enthusiastic, and willing to make extra effort to complete tasks.

The Influence of Employee Engagement on Work-Life Balance

The test results showed a coefficient value of 0.724, with a T-statistics of 11.011 and a P-value of 0.000. This indicates that Employee Engagement has a positive and significant effect on Work-Life Balance.

These findings suggest that employees with a high level of engagement in their work tend to be better at managing the balance between work life and personal life. Engaged millennial employees usually have better time management and are able to handle work stress more effectively.

The Effect of Remote Working on Employee Productivity through Employee Engagement

The mediation test results show a coefficient value of 0.560, with a T- statistic of 7.454 and a P-value of 0.000. This indicates that Employee Engagement can significantly mediate the effect of Remote Working on Employee Productivity.

In other words, Remote Working not only directly increases productivity, but also enhances Employee Engagement first, which then impacts productivity improvement. In other words, employee engagement serves as an important mechanism in explaining how remote work systems influence performance. Because both the direct and indirect relationships are significant, the mediation that occurs is partial mediation.

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

The Influence of Remote Working on Work-Life Balance through Employee Engagement

The analysis results show a coefficient value of 0.537, with T-statistics of 6.531 and a P-value of 0.000. This indicates that Employee Engagement significantly mediates the effect of Remote Working on Work-Life Balance.

This means that the flexibility of remote work enhances employee engagement, which ultimately helps them achieve a better work-life balance. Employee Engagement acts as a connecting variable that strengthens the impact of flexible work systems on the life balance of millennial employees. Since both the direct and indirect effects are significant, the mediation that occurs is also partial mediation.

CONCLUSIONS AND RECOMMENDATIONS

The findings of this study reveal that remote working and employee engagement play significant roles in influencing productivity and work-life balance among millennial employees in D.I. Yogyakarta. Specifically, remote working has a positive and statistically significant effect on employee engagement. The flexibility of time and workplace provided by remote working increases employees' sense of autonomy and comfort, which ultimately strengthens their emotional attachment and commitment to the organization. This indicates that a well-managed remote working system can enhance employees' psychological involvement in their work.

Based on these findings, several recommendations are proposed. For organizations in D.I. Yogyakarta, it is important to manage remote working systems in a structured and strategic manner. Companies should establish clear performance targets, implement output-based evaluation systems, and provide adequate technological support to ensure effective implementation. In addition, organizations are encouraged to strengthen employee engagement through transparent communication, recognition of employee achievements, and career development programs. Creating a supportive work environment and avoiding excessive workloads are also essential to maintain employee productivity and work-life balance.

FURTHER STUDY

For future researchers, this study may be expanded by involving employees from different regions or generations to increase generalizability. Additional variables such as job satisfaction, organizational support, or burnout may also be incorporated to develop a more comprehensive research model. Furthermore, adopting a mixed-

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

methods or qualitative approach could provide deeper insights into employees' experiences in implementing remote working systems and maintaining engagement in flexible work environments.

REFERENCES

Agustin et al. (2021). UES, Volume 2, Nomor 3, Tahun 2021 e-ISSN: 2721-6810 Pengaruh Self Efficacy Terhadap Kinerja Karyawan Melalui Komitmen Organisasional Sebagai Variabel Intervening Pada Cv. ERA DUA RIBU BANGLI. 2, 772–781.

Anand, A. A. (2021). Employee Engagement in A Remote Working Scenario. 14(2), 119–127.

Anggraini, D., Juniarly, A., & Pratiwi, M. (2024). Work Engagement pada Karyawan yang Bekerja secara Remote Ditinjau dari Meaningful Work. 5(September), 408–418.

Badar, K., & Lasthuizen, K. (2023). Twenty Years of Research on Millennials at Work : A Structural Review Using Bibliometric and Content Analysis.

Bal & Bulgur, 1. (2023). A Paradigm Shift in the Modern Workplace and Its Impact on the Workforce Remote Work : 2022–2024. https://doi.org/10.4018/978-1-6684-9172-0.ch019

Baliling, K. T. B. (2025). Exploring the Role of Leadership Support in Moderating the Relationship of Remote Working and Job Satisfaction. IX(2454), 835–856. https://doi.org/10.47772/IJRISS

Calista. (2024). P E N G A R U H EMP L O YE E E NG A G EME NT DAN K ARAKT E R I S T I K P EK E R J A A N T E RHA D A P PRODUKTIVITAS KERJA PEGAWAI PADA KANTOR BALAI PENYULUHAN PERTANIAN DESA KASMARAN KECAMATAN BABAT TOMAN. 7(1), 45–56.

Dutt et al. (2024). The Impact of Remote Work on Employee Productivity and Engagement. 14(1), 139–149.

Dutta, S. (2025). Global Trends in Remote Work Adoption: A Statistical Analysis of Workforce Data. Jurnal Ekonomi dan Statistik Global, 15(1), 55-70. https://doi.org/10.4018/979-8-3373-0071-9.ch006

Fauzya, H. A., & Chaniago, H. (2022). Pengaruh Employee Engagement Terhadap Employee Performance (Studi Kasus pada PT XYZ Bandung). 3(1), 97–110.

Galanti, T. (2021). Work From Home During the COVID-19 Outbreak. https://doi.org/10.1097/JOM.0000000000002236

Jex et al. (2024). Organizational Psychology: A Scientist-Practitioner Approach. Edisi Ke-5. John Wiley & Sons.

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

Malasari. (2022). Pengaruh Employee Engagement terhadap Work-Life Balance saat Melaksanakan Work from Home. 2(1), 212–219.

Monteiro. (2019). Independent Distributors in Servitization : An Assessment of Key Internal and Ecosystem-related Problems Independent Distributors in Servitization : An Assessment of Key Internal and Ecosystem-related Problems. 2, 1–55.

Nasution et al. (2022). Pengaruh Efikasi Diri, Keaktifan Berorganisasi, Lingkungan Keluarga dan Locus of Control terhadap Kesiapan Kerja Mahasiswa Universitas Negeri Padang di masa Pandemi Covid-19 DOI:10.24036/jmpe.v5i3.13030.

Nuraliza, A. (2023). Pengaruh Employee Engagement Dan Komitmen Organisasi Terhadap Kinerja Karyawan Dengan Kepuasan Kerja Sebagai Variabel Intervening Pada Pt . Elco Indonesia Sejahtera Kota Garut. 9(3), 741–748.

Puspitasari. (2024). Pengaruh Pengalaman Prakerin, Self Efficacy dan Internal Locus of Control Terhadap Kesiapan Kerja Siswa SMK di Bidang Akuntansi. Jurnal Pendidikan Akuntansi (JPAK), 10(1), 31–43. https://doi.org/10.26740/jpak.v10n1.p31-43.

Putra et al, K. C. (2020). The Impact of Flexible Working Hours , Remote Working , and Work Life Balance to Employee Satisfaction in Banking Industry during Covid-19 Pandemic Period. 1(5), 341–353. https://doi.org/10.47153/jbmr15.592020

Rachmawati, D., W. (2023). Self-Efficacy dan Prestasi Belajar: Studi Korelasi pada Mahasiswa Keperawatan. Jurnal Keperawatan Indonesia, 5(1), 1-10.

Rañeses, M. S. (2022). Investigating the Impact of Remote Working on Employee Productivity and Work-life Balance : A Study on the Business Consultancy Industry in Dubai , UAE. 8(2), 63–81.

Rizqa Nadhifa, Hafshah. (2022). The Impact of Remote Work During COVID-19 Pandemic on Millennial Employee Performance : Evidence from the Indonesian Banking Industry. 7(2), 15–39.

Roberto, R., Zini, A., Felici, B., & Rao, M. (2023). applied sciences Potential Benefits of Remote Working on Urban Mobility and Related Environmental Impacts : Results from a Case Study in Italy.

Rustan et al. (2024). A Review of Work-Life Balance Trends in Remote Work. 5(July), 316–330. https://doi.org/10.47857/irjms.2024.v05i04.01841

Singh, S., & Chaudhary, N. (2022). Employee Productivity : An Analysis of Dimensions and Methodology through Systematic Literature Review. 21(4).

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

Utoyo. (2025). PENGARUH EMPLOYEE ENGAGEMENT TERHADAP KINERJA KARYAWAN PADA PT . KANAAN JAYA The Influence Of Employee Engagement On Employee Performance. 793–803.

Wijayanto et al. (2022). PENGARUH WORK LIFE BALANCE TERHADAP EMPLOYEE ENGAGEMENT DAN DAMPAKNYA TERHADAP TURN-OVER INTENTIONS DENGAN JOB CHARACTERISTICS SEBAGAI PEMODERASI (Studi Pada Karyawan Generasi Y di Indonesia). 10(1), 83–98. https://doi.org/10.26740/jepk.v10n1.p83-98

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