Ilomata International Journal of Management
P-ISSN: 2714-8971; E-ISSN: 2714-8963
Volume 5, Issue 1, January 2024
Page No: 97-112

Is Reliable Information Technology Important For Supporting Work-From-Home Practices in Mining Companies After the Pandemic?

Nodi Winata[1], Sri Fitriani[2], Mugi Gustari[3], Anita Maharani[4]
[1234]Universitas Bina Nusantara, Indonesia
Correspondent : anita.maharani@binus.edu[4]

Received : November 10, 2023
Accepted : January 2, 2024
Published : January 31, 2024

Citation: Winata, N., Fitriani, S., Gustari, M., Maharani, A. (2024). Is Reliable Information Technology Important For Supporting Work-From-Home Practices in Mining Companies After the Pandemic?. Ilomata International Journal of Management, 5(1), 97-112.
https://doi.org/10.52728/ijjm.v5i1.1023

ABSTRACT: The goal that is expected to be achieved in this research is to determine the influence of IT reliability in supporting WFH for work-life balance, employee performance and cost reduction in mining companies. There has not been much research on WFH practices with reliable IT support in mining companies, where mining companies generally use long working hours for their employees to be fully present at the mining site. The population in this research are employees of mining companies whose mining locations are spread across several places and exploitation activities are carried out entirely by contractors. The research method is descriptive with a quantitative approach. Based on this research, it was found that IT reliability in supporting WFH has a significant impact on work-life balance and cost reduction for employees. However, on the other hand, it was also found that the presence of IT in supporting WFH did not significantly influence employee performance and work-life balance was not found to be able to mediate employee performance.

Keywords: IT reliability in supporting WFH, Work-life Balance, Employee Performance, Cost Reduction

INTRODUCTION

In an era of continuously developing business dynamics, work paradigms are experiencing significant changes. These changes are due to technological advances and conditions emphasizing the need for flexibility. This phenomenon covers various forms of organization, including companies operating in the mining industry. The mining industry is often associated with field activities and emphasizes the direct presence of workers at work sites, which are mine sites.

The mining industry is very important in a country's economy, and in this case, Indonesia's. Based on data from the Central Statistics Agency, it is reported that the mining sector and related businesses will contribute 12.22 percent to Indonesia's total economic growth in 2022 (Pink, 2023). Moreover, Indonesia's main energy supply still uses fossil fuels, including coal (Dihni, 2021). Coal production is carried out continuously at mining locations using work schedules with special

regulations and policies. The work schedule in mining is different from the work schedule in general, where a coal mining worker can work 12 hours per day with a maximum work period of 10 consecutive work weeks, with two consecutive weeks of rest (Wahyuni, 2022).

However, in recent times, the world of work has experienced quite big changes, namely with the increasing prevalence of flexible work arrangements, and this is happening in almost all industries, which is one of the impacts of the COVID-19 pandemic. These changes impact the organization of human resources in companies to respond to extraordinary events that could hurt business. Thus, in 2020 – 2022, many studies have emerged that try to see the impact of implementing human resource regulatory mechanisms on company performance. The keyword that often appeared during that time was working from home, based on a search on December 27, 2023, at 07.34 WIB, using scholar. Google. co,id 1,820,000 results were found.

Research by (Bick et al., 2020; Yasenov, 2020), and so on describes the practice of working from home. This research was followed by the emergence of studies throughout the world that attempted to link work-from-home practices with matters related to human resources, including work-life balance, work stress (Irawanto et al., 2021), work productivity, work engagement, stress (Galanti et al., 2021).

Of all the existing research, interestingly, most of the research was conducted in types of organizations that focused on the service sector (Sahni, 2020) and information technology. Meanwhile, before 2019, research on work from home was also carried out in other industries, including businesses that focused on mining (Mostert & Rathbone, 2001).

The IISD report (2020) describes the impact of the pandemic on employment in the mining business, where two things encourage companies engaged in the mining business to carry out work modes adapted to the pandemic situation, namely because they are located in remote areas. The mining business contributes to a country's gross national product, which drives the need to learn the practice of working from home in the mining business. WFH challenges the traditional paradigm and, on the other hand, offers an alternative way of working in the mining world. The mining business is a business that has five categories, namely exploration, construction, extraction, operation, mineral processing, and finally, closure and decommissioning. With these five categories, one mining company and another mining company have their uniqueness. This uniqueness can be illustrated in mining companies with special characteristics, namely mining business permit holders, whose locations are separated in several places, mining activities are carried out entirely by contractors and sub-contractors, they focus more on mining design and administrative work and do not focus their employees on always be at the mining location. So, most of these mining companies can work from home (WFH).

The practice of working from home since the pandemic is considered normal by companies from various types of industries; of course, its implementation is also closely related to the consequences that have been considered previously. The problem is that the work-from-home system also has challenges, namely the demand that workers maintain their performance and face various job demands, including other workloads, working hours, worker participation, worker communication

with superiors, and various other work demands (Nakrošienė, 2019). There is attention to company support for workers who use the work-from-home system, including the importance of facilities and infrastructure and routine communication between superiors and subordinates (Napitu et al., 2021; Rieth & Hagemann, 2021).

WFH provides freedom, which will later affect employee performance in the company. Previous studies found that working from home can affect employee performance (Anakpo et al., 2023; Susilo, 2020). Then, several terms developed with the same meaning, including telecommuting, electronic PR, telecommuting, flexiwork, mobileworking, work from home, and remote work (Mungkasa, 2020).

There are many benefits of working from home, and among the many benefits produced by the work-from-home system is a reduction in costs and time spent by workers traveling to work (Church, 2015; Crosbie & Moore, 2004; Srivastava, 2015). However, there are other considerations related to working from home, namely regarding the information technology used when working from home. The correct use of information technology when practicing work from home can also influence the outcomes of the work carried out by employees (Sriyaningsih et al., 2022). Information technology can also influence employee performance (Bawono & Setyadi, 2021).

Based on the explanation above, researchers consider it necessary to research further how the system works after the COVID-19 pandemic is deemed to have ended. Although much research has examined how effectively the system works during a pandemic, only a few have studied mining companies. Even though research has been conducted in the mining industry, it is still limited to technical operations.

The research aims to see how much influence the reliability of technology has in supporting the implementation of work-from-home on work-life balance, employee performance, and cost reduction in the mining business.

Information Technology Reliability

Many writers emphasise the need of integrating IT into all organisational tasks in order to maximise IT's ability to affect organisational performance and competitiveness (Tusubira & Mulira, 2004). However, because the significance and necessity of IT usage in organisations appear to be undeniable, there is a need for study and assessment of its use in organisations. Indicators for information technology reliability were adapted from Amanda et al (2021): 1. Information and technology for completing task, 2. Information and technology enabler to work from home, 3. Data accessibility,. 4. Communicate with team, 5. Monitoring work result

Employee Performance

Employee performance has many definitions, including the ideal condition desired between employees and the company (Maden-Eyiusta & Alten, 2021). Indicators for employee performance

was adapted from (Choukir et al., 2022): 1. Work efficiency, 2. Work productively, 3. Problem solving. 4. Quality of work, 5. Work focus.

Cost Reduction

The explanation of cost reduction can refer to a view that sees the impact of working from home, including reducing the costs that must be incurred by workers and companies when working from home, and more specifically, the conversion of time that workers usually spend going to the workplace, before practicing work from home (Judge & Kammeyer-Mueller, 2022; Tyler, 2021). Indicators related to cost reduction were adapted from (Hensher et al., 2017): 1. Transportation cost efficiency, 2. Meals cost efficiency, 3. Attire cost efficiency, 4. Home service cost efficiency.

Work from home practices

Work from home can be explained as a work arrangement carried out by changing the work location from the company to home, and work from home can also be known as telework or remote work (Anakpo et al., 2023). Indicators for work-from-home practices were adapted from Amanda et al. (2021): 1. Satisfaction with work-life balance, 2. Ability to self-enjoyment, 3. Self-involvement of work, life balance, 4. Happiness related to work-life balance, 5. Less pressure of work between home or office Research conducted by (Kaushik & Guleria, 2020) shows that most companies see WFH as a crucial element in maintaining the continuity of their operations, even on a limited scale. WFH has a positive change for many people because it keeps workers productive while helping maintain work-life balance. One of the prominent positive impacts of adopting this model is its ability to create balance between work and personal life. WFH not only enables productivity, but also gives individuals the flexibility to manage their time according to personal needs. This is what helps maintain a healthy balance between aspects of work and daily life.

The concept of working from home (WFH) equipped with information technology (IT) support is very important in the current digital era. According to (Bhattacharya & Mittal, 2020), the existence of IT equipment and infrastructure such as desktops, printers and/or internet connections allows employees to work remotely. WFH practices that use ICT (Information and Communication Technology) enable increased productivity, improved work-life balance, flexibility, and improved communication with colleagues (Beno & Hvorecky, 2021). WFH can have an impact on two big domains, namely work and personal life (Vyas & Butakhieo, 2021). However, if employees are equipped with good technological equipment, it is hoped that it will have a positive influence on employee performance. Therefore, companies must ensure that employees have easy access to reliable IT equipment and infrastructure, as well as provide the necessary training and support to ensure that employees can work effectively remotely.

Hypothesis 1: The information technology reliability will influence work from home practices positively

Companies implementing work-from-home policies can encourage improved company performance (Anakpo et al., 2023; Susilo, 2020). Several benefits from implementing work from home, which are considered to encourage employee performance, are due to the possibility that employees will pay good attention to their work. Work-life balance, positive employee attitudes towards the company, reduced stress levels, and savings in costs usually incurred by employees to get to work. To be said to be an ideal work system, all work systems implemented must be able to maintain employee performance (Vyas & Butakhieo, 2021), and this is no exception for companies that implement a work-from-home system.

Hypothesis 2: Work from home practices will influence employee performance positively

Technology can create an ecosystem where employees can stay connected, collaborate, and perform their duties efficiently. (Kaushik & Guleria, 2020) research provides the basis, highlighting that the pandemic has resulted in companies being reactive and responding to developing conditions by implementing flexible work systems. However, this is still seen as a temporary solution.

In reality, the conditions during the pandemic opened the eyes of all parties; two domains must be managed by both employees and companies, namely, related to the work domain and the personal life domain (Vyas & Butakhieo, 2021). Therefore, companies need to equip their employees with work support facilities, including technological equipment. Good technological equipment can positively influence employee performance (Beno & Hvorecky, 2021). Companies can make some efforts to ensure employees have easy access to reliable IT equipment and infrastructure (Bhattacharya & Mittal, 2020).

Hypothesis 3: The information technology reliability will influence employee performance positively

Since the pandemic occurred, and there have been adjustments to work systems in companies, a new phenomenon has emerged, namely related to savings. The savings in question are reductions in fuel use, toll, insurance, food, and child and elder care costs (Beno & Hvorecky, 2021).

(Sahin & Topal, 2018) argue that the effective use of information technology can encourage increased business performance in general. Therefore, companies supporting virtual working practices can positively impact many things (Adamovic et al., 2021). In this case, some costs are usually incurred when employees must be physically present at the company.

Hypothesis 4: The information technology reliability will influence cost reduction positively

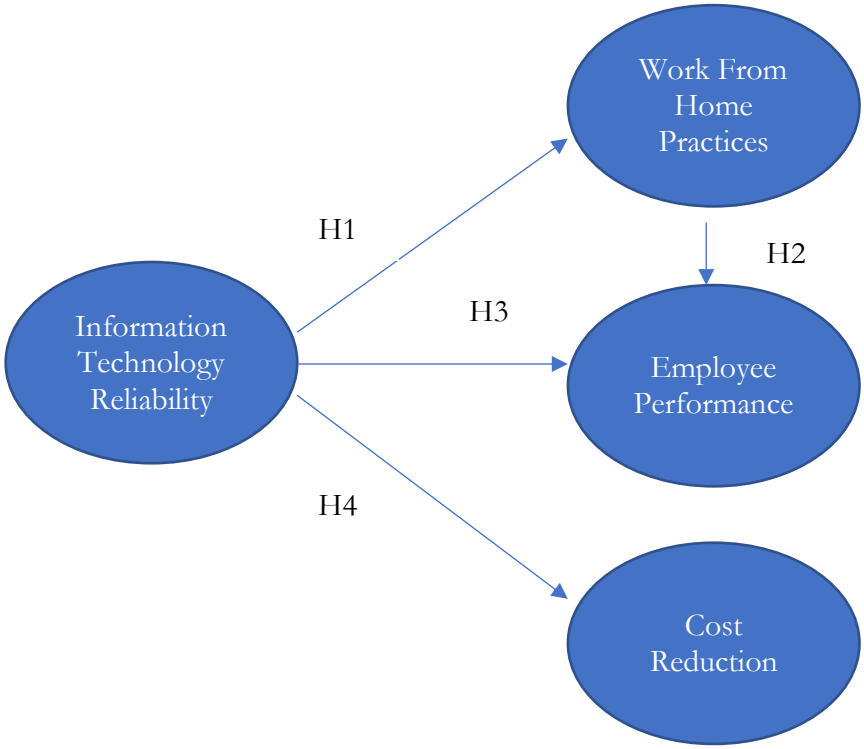

Figure 1. Research Model (as modified from hypothesis development

METHOD

Research Design

Research design is a structure or plan used to collect, measure, and analyze data in a research study. The focus of research design is to transfer research questions and objectives into the form of a concrete research project (Saunders et al., 2019) the impact of Information Technology reliability, on work from home, employee performance and cost reduction, while also assessing the effect of work from home to employee performance. This research strategy is survey research, with the study setting being non-contrived, the unit of analysis is the individual, the time horizon is one-shot or cross-sectional (Sekaran & Bougie, 2016).

Participants and Sampling

The research survey was conducted among employees at one of the largest private coal mining companies in Indonesia. This company has its head office in Jakarta and mining locations are spread across several places in South Kalimantan province. This company is unique compared to mining companies in general in that almost all operational activities are carried out by contractors and sub-contractors. The population itself is 400 employees and to determined sample, we apply Slovin formula and resulted in 124 at least for sample.

Survey Design and Data Collection

The survey design for this research used a questionnaire with a 5-point Likert scale (from one, meaning "strongly disagree," to five, meaning "strongly agree"). Data was collected through distributing questionnaires, which were carried out for two months, namely October 2023 – November 2023.

Data Analysis

Data from the questionnaire results will be further processed to find out the answer to the aim of this research. To analyze data collected from the survey, we use PLS-SEM with two steps of analysis: 1) measurement model, then 2) structural model.

RESULTS AND DISCUSSIONS

Respondents Profile

From the day the questionnaire was distributed for two months, 212 respondents were obtained; in other words, it exceeded the target set when calculating the research sample. Furthermore, the majority of respondents in this study were between 30 and 40 years old and worked in various areas, such as Jakarta and several areas in South Kalimantan. The respondents involved in this research have jobs that combine the field and the office; in other words, the respondents have two work locations, not only in the workroom but also at the mining site. Most respondents involved in this research were men, and most had worked for 10 – 20 years. From the results of this data collection, the data then undergoes further data processing to prove the previously established hypothesis.

Validation of research models can be done in several ways, one of which is Structural Equation Modeling (SEM) which has the ability to test causal relationships, build several measurement items, can also handle different measurement models: composite, common factors, and causal-formative measurements, including explaining differences between types of measurement models and clearing up possible ambiguities regarding formative endogenous constructs (Hensher et al., 2017). On the other hand, PLS is a technique used to evaluate the psychometric properties of theoretical models and hypotheses, a structural equation modeling technique in evaluating how items load on their constructs simultaneously by approaching all paths in the model.

Reliability and Validity Test

Analysis of the relationship between constructs can only be carried out if there is sufficient evidence of their validity and reliability (Henseler, 2017). In carrying out the validity test used is the discriminant test and convergent validity test which considers the calculation of the Average Variance Extracted (AVE) loading factor with a value that must be higher than 0.5. The model calculation uses the SMART PLS application which selects a minimum value of 0.7 for the loading factor. The convergent test on the construction of this research model shows a loading factor value

> 0.7 and an AVE value > 0.5 as shown in Table 1 and Figure 2 regarding the inner model below, so it is acceptable.

Table 1. Construct Reliability and Validity

Variabel	Coding	Loading Factor	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Cost Reduction			0,957	0,959	0,967	0,856
	A2	0,737				
	A3	0,761				
	A4	0,874				
	A5	0,785				
Employee Performance			0,917	0,919	0,941	0,8
	B1	0,789				
	B2	0,738				
	B3	0,79				
	B4	0,848				
	B5	0,829				
Work From Home Practices			0,859	0,864	0,898	0,639
	C1	0,871				
	C2	0,912				
	C3	0,915				
	C4	0,879				
Information Technology Reliability			0,8	0,805	0,869	0,626
	D1	0,924				
	D2	0,958				
	D3	0,946				
	D4	0,96				
	D5	0,832				

Discriminant validity assessment uses Fornell Larcker criteria and Cross loading test. The Fornell-Larcker criterion postulates that a construct's AVE must be higher than all of its squared correlations (Henseler, 2017). Researchers can rely on additional assessment criteria for covariance-based SEM (Markus & Borsboom, 2013) to assess Cross loading. This research model has passed the discriminant validity test, as shown in Table 2. However, in the discriminant validity test process the researcher had to eliminate one indicator in the IT Reliability variable, namely A1.

Table 2. Fornell-Larcker Criterion

	Cost Reduction	Employee Performance	Work Life Balance	Information Technology Reliability
Cost Reduction	0,925			
Employee Performance	0,538	0,894		
Work From Home Practices	0,301	0,335	0,8	
Information Technology Reliability	0,489	0,363	0,464	0,791

Cronbach's Alpha calculations can be used to assess internal consistency reliability tests whose recommended value is > 0.7 as shown in Table 1, so that this research model is declared to have passed the Cronbach's Alpha test. Internal consistency reliability quantifies the amount of random measurement error in the construct score which functions as surrogate for latent variables. The recommended value for composite reliability is 0.7.

The composite reliability values of this research model exceed the recommended value limits, all showing > 0.7 as shown in Table 1. The results of the convergent validity and discriminant validity tests shown in Table 1 show that the validity test is acceptable because the first and second step approaches for variance have been carried out as suggested by SEM. Variables are accepted by Cronbach's Alpha and composite reliability, as the values shown in Tables 1 and 2. Therefore, this research model can be continued to assess the structure and Fit model which is then used to determine the relationship between the variables proposed in the hypothesis.

Assessment Structure and *Model Fit*

The R-Square value of the independent variable or exogenous variable will affect the correlation between the dependent variable (X) and the independent variable (Y). The R-square Cost Reduction variable is 0.240, which means 24.0% of Cost Reduction is influenced by IT Reliability that supports WFH practices. On the other hand, the Work Life Balance variable has an R-square variable of 0.215, which means that 21.5% of Work Life Balance is influenced by IT reliability that supports WFH practices. Meanwhile, the R-square Employee Performance variable is 0.167, which is 16.7%. Employee Performance is influenced by IT Reliability which supports WFH practices and is mediated by Work Life Balance as shown in Table 3 below.

Table 3. R-Square

	R-square	R-square adjusted
Cost Reduction	0,240	0,235
Employee Performance	0,167	0,158
Work From Home Practices	0,215	0,211

The path coefficient is a value to indicate the direction of the variable relationship in the range (-) 1 to 1. Our research model has a positive value path coefficient, indicating (+) positive direction of the variable relationship. Patch coefficients will be shown in Table 4.

Table 4. Path Coefficient

	Cost Reduction	Employee Performance	Work Life Balance	Information Technology Reliability
Cost Reduction				
Employee Performance				
Work From Home Practices		0,212		
Information Technology Reliability	0,489	0,264	0,464	

The research model significance was tested using the bootstrap method with a significance level of 0.05. If the T-statistic value is > 1.96 then the relationship between exogenous and endogenous variables is significant. If the T-statistic value is <1.96, then the relationship between exogenous and endogenous variables is not significant. Except for the relationship between the Work Life Balance variable and the Employee Performance variable with a T-statistic value <1.96, which means it is not significant, the rest of the research model shows a T-statistic value > 1.96 between variables, which means each variable is substantial.

In table 5. A description of the influence between the independent variable and the dependent variable is shown. In this table, showed hypothesis 2 and 3 were not supported. Meanwhile, hypothesis 1 and 4 were supported.

Table 5. Bootstraping

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Information Technology Reliability -> Work From Home Practices	0,464	0,475	0,081	5,736	0
Work From Home Practices -> Employee Performance	0,212	0,221	0,121	1,752	0,081
Information Technology Reliability -> Employee Performance	0,264	0,268	0,086	3,066	0,002
Information Technology Reliability -> Cost Reduction	0,489	0,49	0,061	8,059	0

Apart from using the results shown in the tables above, researchers also tried to look at the predictive relevance results. Conceptually, predictive relevance is a value that shows how well the observation value can be calculated using the Blindfolding test. If the value is above 0, then the observation value is good. Meanwhile, model fit is a test to find out how good the research model is using the NFI percentage value which must be above 0.5.

Table 6. Blindfolding Test

	SSO	SSE	Q^2 (=1-SSE/SSO)
Cost Reduction	920	734,503	0,202
Employee Performance	736	641,607	0,128
Information Technology Reliability	736	736	0
Work From Home Practices	920	800,397	0,13

Our research model has shown blindfolding in Table 8, a value above 0 and an NFI value of 0.853, which means that this research model has good observations and the model is suitable for use for research analysis.

Table 7. NFI – Model Fit

	Saturated model	Estimated model
SRMR	0,073	0,127
d_ULS	0,914	2,767
d_G	0,373	0,426
Chi-square	402,1	442,318
NFI	0,853	0,838

Based on Table 7., researchers are confident that this model can be considered capable of explaining phenomena related to IT reliability that supports WFH of 85.3%. Therefore, the results shown in bootstrapping can represent phenomena in the world of work, especially the research objects used by researchers, was 85.3%.

This research showed that IT reliability positively influenced work from home, or hypothesis one was supported. The results of this study confirm the previous views expressed by Bhattacharya and Mittal (2020) and Beno et al (2021). The results of this study illustrate that respondents who have worked for more than ten years and are aged between 30 and 40 years in mining companies, and whose work location is between the office and the field have the opinion that for the success of the work from home, the system requires IT reliability requirements. Several things related to IT reliability are 1. information and technology for completing tasks, 2. information and technology enablers to work from home, and 3. data accessibility. 4. communicate with the team, 5. monitor work results.

Another result found in this research was that work-home practices would influence employee performance positively, was not supported or hypothesis two was not supported. This result contrasts the findings of Anakpo et al. (2023), who found that working from home can affect employee performance. The suspicion that arises regarding whether this hypothesis is not supported is because the views of respondents who have worked for more than ten years and work between the office and the field in companies operating in the mining industry do not see working from home as supporting their performance as employees. However, previous research has found that working from home can hurt employee performance, especially in jobs requiring teamwork (Lippe & Lippényi, 2019). Therefore, even though this research hypothesis is refuted, previous research evidence shows the possibility that work-from-home practices do not have a positive impact on employee performance.

Also, the result showed that information technology reliability will influence employee performance positively was not supported, or hypothesis three was not supported. This result contradicts the research results of Beno & Hvorecky (2021), who stated that if employees are equipped with good technological equipment, they are expected to influence employee performance positively.

However, IT reliability will influence cost reduction positively, or hypothesis four was supported. Many benefits can be obtained by employees who rely on IT reliability, such as reducing fuel use, toll costs, insurance costs, food costs, and child and parent care costs (Beno & Hvorecky, 2021). Even though other costs for internet connections and electricity may increase, the value is still much smaller than the savings that can be made.

CONCLUSIONS

This research found that IT reliability positively influences work from home and will positively influence cost reduction. So, companies that provide their employees with reliable information technology facilities can support work-from-home practices and reduce costs that are usually associated with employees when they go to work.

However, apart from the proven hypothesis, two unproven hypotheses, namely, work-home practices would influence employee performance positively, and information technology reliability would influence employee performance positively, need to be supported. This research shows an interesting phenomenon in mining companies: the implementation of work-from-home practices does not positively influence employee performance. If the company tries to provide facilities such as information technology, it does not influence employee performance.

Apart from the study results obtained, it needs to be acknowledged that this research has several limitations, including the lack of heterogeneity (only one company explored). Therefore, the results found from this research may be limited.

For future research, it is recommended to conduct research involving respondents who are mining workers who use work schedules commonly used by mining companies, including employees who hold mining permits, mining contractors, or sub-contractors.

REFERENCE

Adamovic, M., Gahan, P., Olsen, J., Gulyas, A., Shallcross, D., & Mendoza, A. (2021). Exploring the adoption of virtual work: the role of virtual work self-efficacy and virtual work climate. *The International Journal of Human Resource Management*, *33*, 3492 – 3525. https://doi.org/10.1080/09585192.2021.1913623.

Anakpo, G., Nqwayibana, Z., & Mishi, S. (2023). *The Impact of Work-from-Home on Employee Performance and Productivity: A Systematic Review*. Sustainability. https://doi.org/10.3390/su15054529.

Bawono, I., & Setyadi, E. (2021). *The Effect of Technology Mastery and Work Motivation on the Performance of the State Civil Apparatus (ASN) of Local Governments on the Implementation of Work from Home as an Impact of the COVID-19 Pandemic* (pp. 11–19). https://doi.org/10.2991/AER.K.210121.003.

Beno, M., & Hvorecky, J. (2021). Data on an Austrian Company's Productivity in the Pre-Covid-19 Era, during the Lockdown and after Its Easing: To Work Remotely or Not? *Frontiers in Communication*, *6*(March), 1–10. https://doi.org/10.3389/fcomm.2021.641199

Bhattacharya, S., & Mittal, P. (2020). The impact of individual needs on employee performance while teleworking1. *Australasian Accounting, Business and Finance Journal*, *14*(5), 65–85. https://doi.org/10.14453/aabfj.v14i5.5

Bick, A., Blandin, A., & Mertens, K. (2020). Work from Home After the COVID-19 Outbreak. *Federal Reserve Bank of Dallas, Working Papers*, *2020*(2017). https://doi.org/10.24149/wp2017r1

Choukir, J., Alqahtani, M. S., Khalil, E., & Mohamed, E. (2022). Effects of Working from Home on Job Performance: Empirical Evidence in the Saudi Context during the COVID-19 Pandemic. *Sustainability (Switzerland*, *14*(6), 1–18. https://doi.org/10.3390/su14063216

Church, N. F. (2015). Gauging Perceived Benefits from Working From Home as a Job Benefit. *International Journal of Business and Economic Development*, *3*(3), 81–89.

Crosbie, T., & Moore, J. (2004). Work–life Balance and Working from Home. *Social Policy and Society*, *3*(3), 223–233. https://doi.org/10.1017/s1474746404001733

Dihni, V. A. (2021). *Kontribusi Pasokan Energi Primer Indonesia Menurut Jenis*.

Galanti, T., Guidetti, G., Mazzei, E., Zappalà, S., & Toscano, F. (2021). Work from home during the COVID-19 outbreak: The impact on employees' remote work productivity, engagement, and stress. *Journal of Occupational and Environmental Medicine*, *63*(7), 426– 432. https://doi.org/10.1097/JOM.0000000000002236

Henseler, J. (2017). Bridging Design and Behavioral Research With Variance-Based Structural Equation Modeling. *Journal of Advertising*, *46*(1), 178–192. https://doi.org/10.1080/00913367.2017.1281780

Hensher, D. A., Beck, M. J., & Wei, E. (2017). Working from home and its implications for strategic transport modelling based on the early days of the COVID-19 pandemic. *Transportation Research Part A: Policy and Practice*, *148*(March), 64–78. https://doi.org/10.1016/j.tra.2021.03.027

Irawanto, D. W., Novianti, K. R., & Roz, K. (2021). Work from home: Measuring satisfaction between work–life balance and work stress during the covid-19 pandemic in indonesia. *Economies*, *9*(3). https://doi.org/10.3390/economies9030096

Judge, T. A., & Kammeyer-Mueller, J. (2022). *Staffing Organizations*. McGraw-Hill Irwin.

Kaushik, M., & Guleria, N. (2020). The Impact of Pandemic COVID -19 in Workplace. *European Journal of Business and Management*. https://doi.org/10.7176/ejbm/12-15-02

Lippe, T., & Lippényi, Z. (2019). Co-workers working from home and individual and team performance. *New Technology, Work and Employment*, *35*, 60 – 79. https://doi.org/10.1111/ntwe.12153.

Maden-Eyiusta, C., & Alten, O. (2021). Expansion-oriented job crafting and employee performance: A self-empowerment perspective'. *European Management Journal*. https://doi.org/10.1016/J.EMJ.2021.10.012.

Markus, K. A., & Borsboom, D. (2013). Reflective measurement models, behavior domains, and common causes. *New Ideas in Psychology*, *31*(1), 54–64. https://doi.org/10.1016/j.newideapsych.2011.02.008

Mostert, K., & Rathbone, A. (2001). Work characteristics, work-home interaction and engagement of employees in the mining industry. *Management Dynamics*, *16*(2), 36–52. https://doi.org/http://reference.sabinet.co.za/sa_epublication_article/mandyn_v16_n2_a4

Mungkasa, O. (2020). Bekerja Jarak Jauh (Telecommuting): Konsep, Penerapan dan Pembelajaran. *Bappenas Working Papers*, *3*(1), 1–32. https://doi.org/10.47266/bwp.v3i1.52

Nakrošienė. (2019). Working from home: characteristics and outcomes of telework. *International Journal of Manpower*.

Napitu, N., Humaizi, H., & Hartono, B. (2021). *Efisiensi Kinerja Aparatur Sipil Negara dalam Sistem Work From Home*. PERSPEKTIF. https://doi.org/10.31289/perspektif.v11i1.5372.

Pink, B. (2023). *Kontribusi Sektor Pertambangan dan Penggalian ke Pertumbuhan Ekonomi Terus Meningkat*.

Rieth, M., & Hagemann, V. (2021). *The Impact of Telework and Closure of Educational and Childcare Facilities on Working People During COVID-19. Zeitschrift für Arbeits- und Organisationspsychologie A&O*. https://doi.org/10.1026/0932-4089/a000370.

Sahin, H., & Topal, B. (2018). Impact of Information Technology on Business Performance: Integrated Structural Equation Modeling and Artificial Neural Network Approach. *Scientia Iranica*, *25*, 1272–1280. https://doi.org/10.24200/SCI.2018.20526.

Sahni, D. J. (2020). Impact of COVID-19 on Employee Behavior: Stress and Coping Mechanism During WFH (Work From Home) Among Service Industry Employees. *International Journal of Operations Management*, *1*(1), 35–48. https://doi.org/10.18775//ijom.2757-0509.2020.11.4004

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (fifth edition (5th). Pearson Education.

Sekaran, U., & Bougie, R. (2016). *Research methods for business : a skill-building approach* (7th Editio). John Wiley & Sons Ltd.

Srivastava, M. (2015). Influencers of Customer Satisfaction - Customer Loyalty Relationship: A Conceptual Research Model. *IMJ*, *7*(1), 54–65.

Sriyaningsih, S., Martini, N., & Nursaid, N. (2022). Analysis of the Effect of Work From Home and the Use of Information Technology on Employee Performance Through Job Satisfaction as Intervening Variable (Study at the Lumajang Regional Forestry Service Branch and Jember Regional Forestry Service Branch. *International Journal of Management Science and Information Technology*. https://doi.org/10.35870/ijmsit.v2i1.469.

Susilo, D. (2020). Revealing the Effect of Work-From-Home on Job Performance during the Covid-19 Crisis: Empirical Evidence from Indonesia. *The Journal of Contemporary Issues in Business and Government*, *26*, 23–40. https://doi.org/10.47750/cibg.2020.26.01.002.

Tusubira, F., & Mulira, N. (2004). Integration of ICT inorganizations: Challenges and best practice recom-mendations based on the experience of Makerere Uni versity and other organizations. In F. F. Tusubira & N. K. Mulira (Eds.), *Universities: taking a leading role inICT enabled human development* (pp. 6–13). Phanton Solutions.

Tyler, K. (2021). How Can HR Professionals Prepare for the Wave of Voluntary Employee Departures that Experts Are Predicting? *HR Magazine*, *66*, 26–31.

Vyas, L., & Butakhieo, N. (2021). The impact of working from home during COVID-19 on work and life domains: an exploratory study on Hong Kong. *Policy Design and Practice*, *4*(1), 59–76. https://doi.org/10.1080/25741292.2020.1863560

Wahyuni, F. (2022). *Intip Gaji Pekerja Tambang Batu Bara, Satu Bulan bisa Dua Digit*.

Yasenov, V. (2020). Who Can Work from Home?*. *Institute of Labor Economics, IZA DP*, *13197*.