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Assessing the Feasibility of Work From Anywhere (WFA) for Local Government Civil Servants in Indonesia: Ergonomic Risk Implications

Teresa I Nangameka[1], Ira Meiyenti[1], Citra Caturani[1*], Yoga Hananta Ginting[1]
Institut Pemerintahan Dalam Negeri[1]
Km 20 Jatinangor, 45362, Indonesia
Correspondence Email: citracccaturani00@gmail.com
ORCID ID: 0009-0007-4984-4182

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ABSTRACT

This study analyzes the feasibility of implementing Work From Anywhere (WFA) for local government Civil Servants (ASN) in Indonesia by placing ergonomic risk as a mediating variable. Changes in the work landscape due to the COVID-19 pandemic have encouraged the adoption of flexible work models. Still, its implementation in the Indonesian public sector faces structural, cultural, and health risk challenges that have not been comprehensively studied. Using a quantitative explanatory approach, data were collected from 177 ASN respondents with prior Work From Home (WFH) experience during the pandemic, providing a relevant empirical basis for evaluating WFA. Data were collected through an online questionnaire based on a Likert scale, covering five main variables: supporting infrastructure, digital competence, organizational support, ergonomic risk, and perception of WFA feasibility. The analysis was conducted using Structural Equation Modeling (SEM) to test the five hypotheses proposed, including the mediating effect of ergonomic risk. The results show that supporting infrastructure and organizational support have a significant positive effect on the perception of WFA feasibility. In contrast, digital competence and ergonomic risk do not significantly influence WFA feasibility.

Keywords: Ergonomics, Civil Servant, Work From Anywhere, Work From Home

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INTRODUCTION

The changing global work landscape due to the COVID-19 pandemic has accelerated the adoption of flexible work models (Shockley & Allen, 2012), (Ekpanyaskul & Padungtod, 2021) (Fadhila & Wicaksana, 2020), including Work From Anywhere (WFA), which allows employees to perform tasks from locations other than the fixed office, with the support of digital technology (Wang et al., 2021) (Kusworo & Fauzi, 2022) (Sumarno et al., 2024). In the private sector, the implementation of WFA has been proven to increase work flexibility, employee satisfaction, and operational cost efficiency (Spreitzer et al., 2017). This work model has also begun to be introduced in the context of the Indonesian bureaucracy, especially in the State Civil Apparatus (ASN) environment (Syaefudin, 2020), along with demands for digital-based bureaucratic reform (Wang et al., 2021). However, the implementation of WFA for the State Civil Apparatus (ASN) is not free from structural and cultural challenges. Previous studies have highlighted the importance of supporting infrastructure such as internet connections, work devices, and data security systems as key factors for the success of remote work (Suyaningsih & Sofiati, 2022). In addition, employee digital competence is also an important requirement in ensuring work effectiveness without direct supervision (Huu, 2023). No less important, organizational support, both from leaders and institutional policies, has been shown to influence employee adaptation to new work systems (Gajendran & Harrison, 2007).

Although the Work From Anywhere (WFA) concept has been proven to provide work flexibility and efficiency in various sectors, its implementation in the state civil apparatus (ASN) environment in Indonesia still faces significant challenges. However, there is a gap in studies on ergonomic risks as a factor that can influence employee perceptions of the feasibility of WFA, especially in the context of the local public sector. In practice, ASN who work from flexible locations are responsible for their own workplace arrangements, which often do not meet minimum ergonomic standards (Oakman et al., 2020). This can cause physical and psychosocial disorders that have a negative impact on work comfort and productivity (Wodajeneh et al., 2023). Therefore, an empirical study is needed to identify the extent to which ergonomic risks play a role as a mediating variable in the relationship between supporting infrastructure and perceptions of WFA feasibility among local government ASN.

Based on this, this study aims to measure the feasibility of implementing Work From Anywhere (WFA) for ASN in local government environments, by placing ergonomic risk as a mediating variable between infrastructure readiness and perception of WFA feasibility. Given that WFA has not been formally and comprehensively implemented in the Indonesian public sector, respondents in this study were selected from ASN who have experience working from home (WFH) during the pandemic. This experience provides a relevant empirical basis for assessing the challenges and opportunities of a non-office work system, so that perceptions of WFA feasibility can be analyzed representatively. This study is expected to contribute to the development of flexible work policies in the public sector that are not only oriented towards efficiency, but also pay attention to aspects of employee health and work comfort.

Furthermore, the ergonomic risk variable is used to describe the potential obstacles or workloads arising from the implementation of WFA, which can originate from physical, work environment, psychosocial, and technical aspects. These risks can affect employee comfort and work effectiveness (Wodajeneh et al., 2023). Finally, the perception of WFA feasibility reflects the extent to which individuals view WFA as a work system that can be implemented effectively. This perception is measured based on perceptions of work productivity and effectiveness, work-life balance, institutional readiness, and the ability to manage ergonomic risks (Ng et al., 2022) (Nurshoimah et al., 2023).

LITERATURE REVIEW

This study is based on several theoretical constructs that have been developed in previous studies related to the implementation of Work From Anywhere (WFA). First, supporting infrastructure includes the availability of work facilities, readiness of physical and digital infrastructure, and technical support from the organization. This infrastructure plays an important role in ensuring the smooth running of remote work and the adaptation of technology in a modern work environment (Ng et al., 2022). Second, digital competence refers to an individual's ability to use digital technology to support daily work, manage and maintain the security of digital data, and readiness to continue learning and adapting to new technologies (Ng et al., 2022) (Ilham, 2023). Third, organizational support consists of structural, coaching, and managerial support provided by the institution to its employees in implementing a flexible work system (Febrita & Prasojo, 2023). This support creates a work environment that supports the success of WFA implementation (Ng et al., 2022).

RESEARCH METHOD

This study uses an explanatory quantitative approach, which aims to explain the causal relationship between variables based on numerical measurements and statistical analysis. This model was chosen because the study not only tests the direct effect, but also explains the mediation mechanism through ergonomic risk. Explanatory research is appropriate for testing hypotheses and building a causal understanding of the phenomenon being studied.

The population in this study were ASN working in local government environments in Indonesia. The sampling technique used purposive sampling, with the criteria for respondents being ASN who have experience working from home (WFH) during the pandemic. Although they have not formally implemented the Work From Anywhere (WFA) scheme, their experience in carrying out work from outside the office is used as a basis for assessing perceptions of the feasibility of implementing WFA, which has similar remote work characteristics but with a wider level of location flexibility. The sample size was determined using the formula of a minimum of 5–10 respondents per indicator in (Kyriazos, 2018). This study consists of 16 indicators with a total of 34 questions. Thus, for 16 indicators, at least 160 respondents are required. The actual number of respondents in this study was 177 people, so it has met the recommended minimum criteria. In addition, it is considered adequate for analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM). According to (Kyriazos, 2018), the recommended minimum ratio is five respondents per variable with a total sample of more than 100, while (Nunnally and Bernstein, 1967) suggest a ratio of 10:1. With 16 main indicators, this study has a ratio of more than 11 respondents per indicator.

Data were analyzed using PLS-SEM with the help of SmartPLS software. This technique was chosen because it is able to accommodate models with many indicators, non-normal data distribution, and moderate sample size. The analysis was carried out in two stages: (1) evaluation of the measurement model (construct validity and reliability), and (2) evaluation of the structural model (hypothesis testing and relationships between constructs). The hypotheses of this study include:

A. Direct Effect Hypothesis

1) H1: Supporting infrastructure has a positive and significant effect on the perception of the feasibility of Work From Anywhere (WFA).

2) H2: Organizational support has a positive and significant effect on the perception of the feasibility of Work From Anywhere (WFA).
3) H3: Digital competence has a positive effect on the perception of the feasibility of Work From Anywhere (WFA).
4) H4: Supporting infrastructure has an effect on ergonomic risks in ASN.
5) H5: Organizational support has an effect on ergonomic risks in ASN.
6) H6: Digital competence has an effect on ergonomic risks in ASN.
7) H7: Ergonomic risk influences the perception of Work From Anywhere (WFA) feasibility.

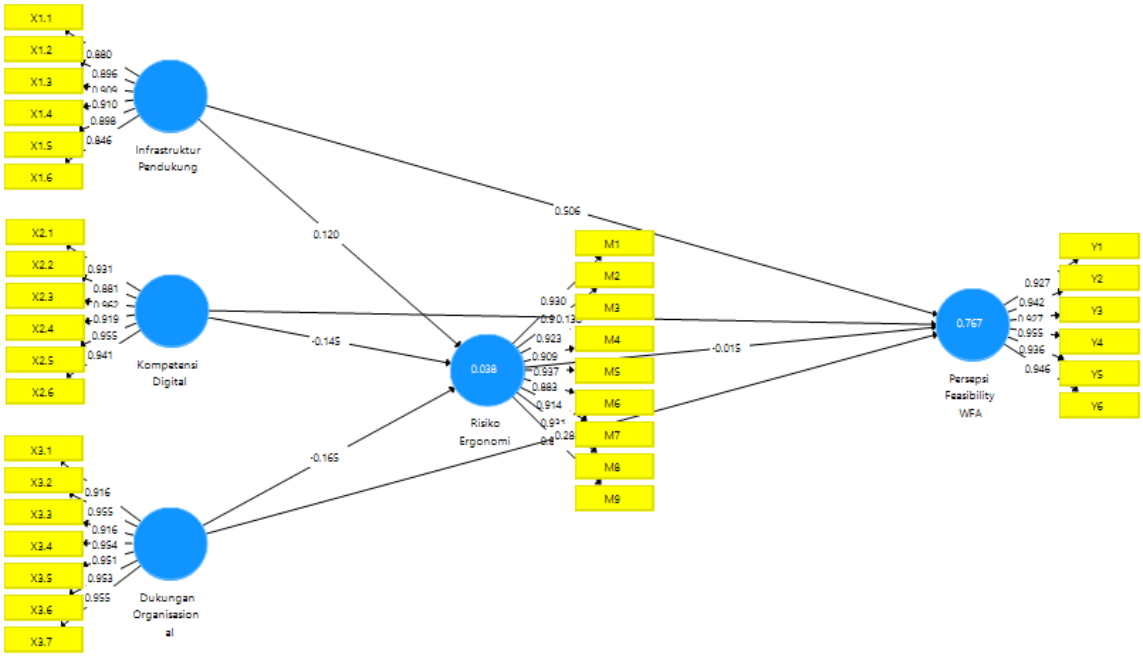
B. Indirect Effect Hypothesis (Mediation)

1) H8: Ergonomic risk mediates the influence of supporting infrastructure on the perception of Work From Anywhere (WFA) feasibility.
2) H9: Ergonomic risk mediates the influence of organizational support on the perception of Work From Anywhere (WFA) feasibility.
3) H10: Ergonomic risk mediates the influence of digital competence on the perception of Work From Anywhere (WFA) feasibility.

RESULTS

a. Model Partial Least Squares Scheme (PLS)

Figure 1. Partial Least Square (PLS) Model Scheme



Source: Processed primary data, 2025

Figure 1 illustrates the results of the structural equation modeling (SEM) using the Partial Least Squares (PLS-SEM) method. The model examines the influence of three exogenous variables—**Supporting Infrastructure**, **Digital Competence**, and **Organizational Support**—on **Perceived Feasibility of Work From Anywhere (WFA)**, either directly or indirectly through the mediating variable **Ergonomic Risk**.

- The **Supporting Infrastructure** construct (X1) is measured by six indicators (X1.1 to X1.6), all of which exhibit high loading values (>0.7), indicating strong construct validity. It has a **direct positive effect** on the perceived feasibility of WFA (β = 0.506).
- The **Digital Competence** construct (X2), represented by six indicators (X2.1 to X2.6), also shows good factor loadings. However, its influence on ergonomic risk is **negative and weak** (β = -0.145), and it does not directly influence WFA feasibility in this model.

- **Organizational Support** (X3) is measured through six items (X3.1 to X3.6), all showing acceptable loadings. It has a **negative influence** on ergonomic risk (β = -0.165), suggesting that higher organizational support may reduce ergonomic risks.
- The **Ergonomic Risk** construct (M) is a mediating variable measured through nine indicators (M1 to M9), with loadings mostly above 0.9, indicating excellent reliability. However, its **effect on the perceived feasibility of WFA is negligible** (β = -0.015), indicating no significant mediation effect.
- The **Perceived Feasibility of WFA** (Y) is the ultimate endogenous variable, measured by six items (Y1 to Y6), with strong loadings (ranging from 0.905 to 0.946). The model shows that it is mainly influenced directly by the **Supporting Infrastructure** variable. The **R^2 value of 0.767** for Perceived Feasibility of WFA indicates that 76.7% of the variance is explained by the model, suggesting a strong explanatory power.

b. Evaluation of Outer Model atau Measurement Model

1) Convergent Validity

Table 1. Outer Loadings

Variabel	Indicator	Outer Loadings	Status
Supporting Infrastructure (X1)	X1.1	0.880	Valid
	X1.2	0.896	Valid
	X1.3	0.909	Valid
	X1.4	0.910	Valid
	X1.5	0.898	Valid
	X1.6	0.846	Valid
Digital Competence (X2)	X2.1	0.931	Valid
	X2.2	0.881	Valid
	X2.3	0.962	Valid
	X2.4	0.919	Valid
	X2.5	0.955	Valid
	X2.6	0.941	Valid
Organizational Support (X3)	X3.1	0.916	Valid
	X3.2	0.955	Valid
	X3.3	0.916	Valid
	X3.4	0.954	Valid
	X3.5	0.951	Valid
	X3.6	0.953	Valid
	X3.7	0.955	Valid
Ergonomic Risks (M)	M1	0.930	Valid
	M2	0.924	Valid
	M3	0.923	Valid
	M4	0.909	Valid
	M5	0.937	Valid
	M6	0.883	Valid
	M7	0.914	Valid
	M8	0.931	Valid
	M9	0.893	Valid
WFA Feasibility Perception (Y)	Y1	0.927	Valid
	Y2	0.942	Valid

	Y3	0.927	Valid
	Y4	0.955	Valid
	Y5	0.936	Valid
	Y6	0.946	Valid

Source: Processed primary data, 2025

Table 1 presents the outer loadings of each indicator associated with their respective latent constructs as part of the measurement model assessment in the PLS-SEM analysis. Outer loadings are used to evaluate the **convergent validity** of reflective indicators, where a loading value greater than **0.70** indicates that the indicator is a reliable measure of the construct (Hair et al., 2019).

All indicators across the five constructs **Supporting Infrastructure**, **Digital Competence**, **Organizational Support**, **Ergonomic Risks**, and **WFA Feasibility Perception** demonstrated outer loading values well above the threshold, ranging from **0.846 to 0.962**. This confirms that each observed variable contributes significantly to its respective latent variable and supports the validity of the measurement model.

- The **Supporting Infrastructure** construct (X1) consists of six valid indicators, with loading values between **0.846 and 0.910**.
- **Digital Competence** (X2) is measured by six indicators, all with very strong loadings between **0.881 and 0.962**.
- **Organizational Support** (X3) includes seven indicators, each showing high reliability with loadings ranging from **0.916 to 0.955**.
- The **Ergonomic Risks** construct (M) is represented by nine indicators, with loadings between **0.883 and 0.937**, indicating consistent measurement.
- Finally, the **WFA Feasibility Perception** construct (Y) has six indicators with high loadings between **0.927 and 0.955**.

These results confirm that all indicators are statistically valid and suitable for inclusion in further structural model analysis.

2) Discriminant Validity

Table 2. Discriminant Validity Metode Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)	**Status**
Organizational Support	0.889	Valid
Supporting Infrastructure	0.792	Valid
Digital Competence	0.869	Valid
WFA Feasibility Perception	0.881	Valid
Ergonomic Risks	0.840	Valid

Source: Processed primary data, 2025

Table 2 presents the Average Variance Extracted (AVE) values for all latent constructs included in the study. AVE is a key metric used to assess **convergent validity** in the context of reflective measurement models. According to Hair et al. (2019), an AVE value of **0.50 or higher** indicates that the construct explains more than half of the variance of its indicators, thus confirming adequate convergent validity.

All constructs in the model exceed the minimum AVE threshold, with values ranging from **0.792 to 0.889**, which strongly supports the internal consistency and reliability of the constructs:

- **Organizational Support** has the highest AVE value at **0.889**, indicating that a large portion of the variance in its indicators is captured by the construct.
- **WFA Feasibility Perception** and **Digital Competence** also show high AVE values at **0.881** and **0.869**, respectively.

- **Ergonomic Risks** has an AVE of **0.840**, and **Supporting Infrastructure** shows a valid AVE of **0.792**.
  These results confirm that the measurement model possesses satisfactory convergent validity, allowing for reliable interpretation of the structural relationships between constructs.

3) Composite Task Realibility

Table 3. Composite Reliability

	Composite Reliability	Status
Organizational Support	0.983	Reliable
Supporting infrastructure	0.958	Reliable
Digital competence	0.975	Reliable
WFA Feasibility Perception	0.978	Reliable
Ergonomic Risks	0.979	Reliable

Source: Processed primary data, 2025

Table 3 displays the **Composite Reliability (CR)** values for each latent construct in the model. Composite Reliability is used to assess **internal consistency** of latent variables in structural equation modeling, particularly within the PLS-SEM framework. Unlike Cronbach's Alpha, CR accounts for the different outer loadings of indicators, offering a more accurate measure of reliability. According to Hair et al. (2019), a CR value above **0.70** is considered acceptable, and values above **0.90** indicate excellent reliability.
All constructs in this study demonstrate **exceptional internal consistency**, with Composite Reliability values ranging from **0.958 to 0.983**:

- **Organizational Support** shows the highest reliability with a CR value of **0.983**, suggesting a very strong internal consistency among its indicators.
- **Ergonomic Risks**, **WFA Feasibility Perception**, and **Digital Competence** also exhibit excellent reliability with CR values of **0.979**, **0.978**, and **0.975**, respectively.
- **Supporting Infrastructure** has a CR of **0.958**, which is still well above the minimum threshold.

These results indicate that all latent constructs are measured consistently and reliably, supporting the validity of further structural analysis.

4) Cronbach's Alpha

Table 4 Cronbach's Alpha

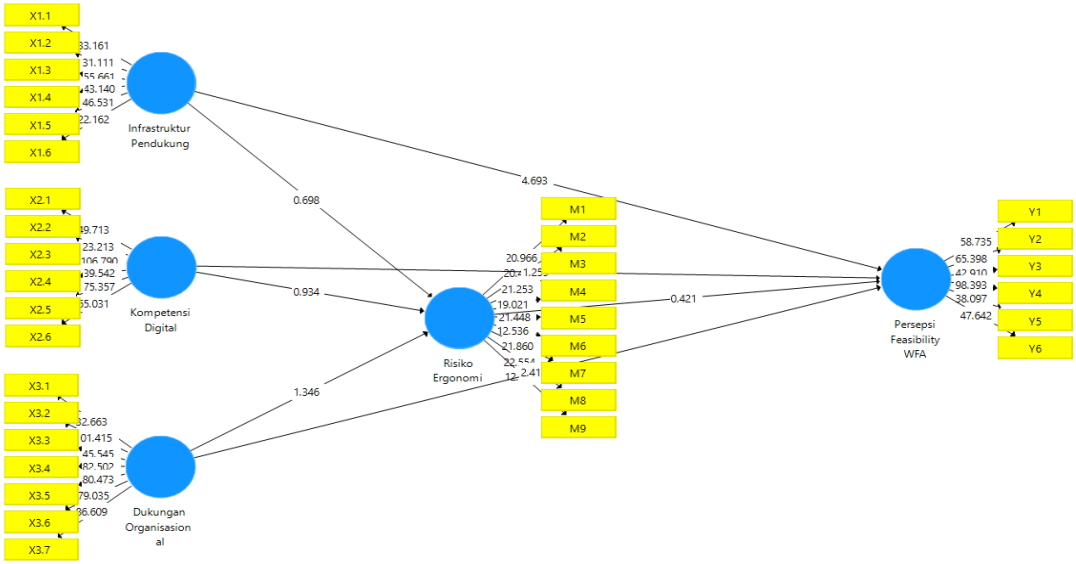
	Cronbach's Alpha	Status
Organizational Support	0.979	Reliable
Supporting infrastructure	0.948	Reliable
Digital competence	0.970	Reliable
WFA Feasibility Perception	0.973	Reliable
Ergonomic Risks	0.976	Reliable

Source: Processed primary data, 2025

Table 4 presents the Cronbach's Alpha values for all latent constructs measured in this study. Cronbach's Alpha is a traditional measure of internal consistency reliability, indicating the degree to which indicators of a latent construct are correlated. A value of 0.70 or above is generally considered acceptable, while values above 0.90 indicate excellent reliability (Hair et al., 2019).
All constructs in this study achieved very high levels of reliability, with Cronbach's Alpha values ranging from 0.948 to 0.979, confirming that the indicators within each construct consistently reflect the same underlying dimension:

- Organizational Support exhibits the highest reliability score of 0.979, suggesting excellent internal consistency.
- Ergonomic Risks and WFA Feasibility Perception also show strong reliability with values of 0.976 and 0.973, respectively.
- Digital Competence has a Cronbach's Alpha of 0.970, and Supporting Infrastructure shows a reliable score of 0.948.
-

Inner Model Evaluation



Source: Processed primary data, 2025

Structural model evaluation is conducted to assess the strength of the relationship between latent constructs and the overall predictive ability of the model. There are three main indicators used, namely the Determination Coefficient (R^2), Predictive Goodness of Fit (Q^2), and path coefficient significance test. The following are the results of SEM-PLS processing for structural model evaluation (inner model):

1. Coefficient Determination (R2)

Table 5. Coefficient Determination

	R Square (R^2)	R Square Adjusted
WFA Feasibility Perception	0.767	0.762
Ergonomic Risks	0.038	0.021

Source: Processed primary data, 2025]

Table 5 reports the **coefficient of determination (R^2)** and **adjusted R^2** values for the two endogenous constructs in the structural model: *WFA Feasibility Perception* and *Ergonomic Risks*. R^2 represents the proportion of variance in the endogenous variable that is explained by its predictor variables. Meanwhile, the adjusted R^2 accounts for the number of predictors relative to the sample size, providing a more accurate estimate in models with multiple predictors.

- The **WFA Feasibility Perception** construct has an R^2 value of **0.767** and an adjusted R^2 of **0.762**, indicating that approximately **76.7% of the variance** in the perceived feasibility of Work From Anywhere (WFA) is explained by the predictor variables in the model. This demonstrates a **strong explanatory power**, suggesting that the constructs such as Supporting Infrastructure and possibly others significantly contribute to shaping WFA perceptions.

- In contrast, **Ergonomic Risks** has a relatively low R^2 value of **0.038** and an adjusted R^2 of **0.021**, which indicates that only **3.8% of the variance** in ergonomic risk is explained by the model. This suggests that the exogenous variables included have **limited explanatory influence** on ergonomic risks in the current model and that other factors outside the model may be more significant in determining ergonomic risk outcomes.
These findings highlight that while the model is highly effective in predicting WFA Feasibility, it has limited predictive power with regard to Ergonomic Risks.

Goodness of Fit

Q Square $= 1 – [(1 – R^2\ 1) \times (1 – R^2\ 2)]$
$= 1 – [(1- 0,767) \times (1-0,038))$
$= 1 – (0,233 \times 0,962)$
$= 1 – 0,224146 = 0,77$

The Q-Square value is 0.77 or 77%. This shows the large diversity of research data that can be submitted by the research model of 77%, while the remaining 23% is explained by other factors outside this research.

3. Hypothesis Testing
Table 6. Results of Hypothesis Testing through Path Coefficient Bootstrapping Technique

		Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Status
A. Direct Effect Hypothesis							
H1	**Supporting infrastructure -> WFA Feasibility Perception**	0.506	0.490	0.108	4.693	**0.000**	**Positive, Significant, Acceptable**
H2	**Organizational Support -> WFA Feasibility Perception**	0.283	0.279	0.118	2.410	**0.016**	**Positive, Significant, Acceptable**
H3	**Digital competence -> WFA Feasibility Perception**	0.138	0.160	0.109	1.259	**0.209**	**Positive, Not Significant, Rejected**
H4	**Supporting infrastructure -> Ergonomic Risks**	0.120	0.102	0.171	0.698	**0.485**	**Positive, Not Significant, Rejected**
H5	**Organizational Support ->**	-0.165	-0.160	0.123	1.346	**0.179**	**Negative, Insignificant, Rejected**

	Ergonomic Risks						
H6	**Digital competence -> Ergonomic Risks**	-0.145	-0.132	0.155	0.934	**0.351**	**Negative, Insignificant, Rejected**
H7	**Ergonomic Risks -> WFA Feasibility Perception**	-0.015	-0.018	0.035	0.421	**0.674**	**Negative, Insignificant, Rejected**
B. Indirect Effect Hypothesis (Mediation by Ergonomic Risks)							
H8	**Organizational Support -> Ergonomic Risks -> WFA Feasibility Perception**	0.002	0.003	0.007	0.333	**0.739**	**Positive,, Not Significant, Rejected**
H9	**Supporting infrastructure -> Ergonomic Risks -> WFA Feasibility Perception**	-0.002	-0.001	0.009	0.201	**0.841**	**Positive, Not Significant, Rejected**
H10	**Digital competence -> Ergonomic Risks -> WFA Feasibility Perception**	0.002	0.001	0.008	0.279	**0.781**	**Positive, Not Significant, Rejected**

Source: Processed primary data, 2025

Table X summarizes the results of the hypothesis testing based on the structural model using PLS-SEM. Both **direct** and **indirect (mediated)** relationships were assessed using bootstrapping procedures, which provided path coefficients (Original Sample), t-statistics, and p-values. Significance was evaluated at a threshold of $p < 0.05$.

A. Direct Effect Hypotheses

- **H1:** *Supporting Infrastructure → WFA Feasibility Perception*
  The relationship is **positive and significant** (β = 0.506, $t = 4.693$, $p = 0.000$), indicating that well-established supporting infrastructure significantly enhances the perceived feasibility of working from anywhere. **Hypothesis accepted**.
- **H2:** *Organizational Support → WFA Feasibility Perception*
  This path is also **positive and significant** (β = 0.283, $t = 2.410$, $p = 0.016$), suggesting that higher perceived organizational support contributes positively to WFA feasibility. **Hypothesis accepted**.
- **H3:** *Digital Competence → WFA Feasibility Perception*
  Although the coefficient is positive (β = 0.138), the result is **not statistically significant** ($t = 1.259$, $p = 0.209$). **Hypothesis rejected**.
- **H4 to H6:** The relationships between Supporting Infrastructure, Organizational Support, and Digital Competence with **Ergonomic Risks** are all **not significant** (p-values > 0.05), suggesting that these predictors do not significantly influence perceived ergonomic risks. **All three hypotheses (H4, H5, H6) are rejected**.
- **H7:** *Ergonomic Risks → WFA Feasibility Perception*
  The relationship is negative but **not significant** (β = -0.015, $t = 0.421$, $p = 0.674$),

indicating that ergonomic risk perceptions do not meaningfully affect WFA feasibility. **Hypothesis rejected**.

B. Indirect Effect Hypotheses (Mediating Role of Ergonomic Risks)

- **H8–H10:** All three indirect paths through **Ergonomic Risks** show **no significant mediation** effect, as indicated by very low t-statistics (< 0.5) and p-values well above 0.05. The mediating role of ergonomic risks between any of the independent variables and WFA Feasibility Perception is **not supported**.

Thus, the accepted hypotheses are only H1 and H2. All other hypotheses, including all mediation hypotheses, are rejected because they do not meet statistical significance ($p > 0.05$).

DISCUSSION

The Partial Least Squares (PLS) model presented in this study aims to analyze the relationship between several latent variables with a focus on the perception of Work From Anywhere (WFA) feasibility and Ergonomic Risks. This model consists of two main components: the outer model (measurement model) and the inner model (structural model).

Outer Model Evaluation (Measurement Model)

1. Convergent Validity

Convergent validity measures the extent to which indicators in a latent variable are correlated with each other. The results are shown through outer loadings: where all indicators have outer loadings values above 0.7, indicating that all indicators are valid in measuring their latent variables. Thus, all indicators in this research model can be declared convergently valid, because they have met the recommended minimum threshold. These results indicate that each construct in the model is able to be represented well by its constituent indicators.

2. Discriminant Validity

Discriminant validity measures the extent to which a construct is truly different from other constructs in the model. Discriminant validity is generally assessed through the Average Variance Extracted (AVE) value and is strengthened by the Fornell-Larcker and Heterotrait-Monotrait Ratio (HTMT) approaches. In this study, the main approach used was AVE. The results show that all constructs have AVE values above 0.50, which is the recommended minimum limit (Hair et al., 2019). These values indicate that more than 50% of the indicator variance can be explained by the construct in question, and each construct in the empirical model has a clear identity and does not overlap conceptually with other constructs.

3. Composite Reliability and Cronbach's Alpha

Construct reliability is evaluated using two approaches, namely Cronbach's Alpha and Composite Reliability (CR). Cronbach's Alpha measures internal consistency between indicators in a construct, while Composite Reliability considers the actual contribution of each indicator in the PLS-SEM model. The results of the analysis show that all constructs have Composite Reliability and Cronbach's Alpha values that exceed the minimum threshold value of 0.70. In fact, most constructs have values above 0.90, which reflects very good reliability. Thus, both in terms of discriminant validity and construct reliability, all latent variables in the model meet the criteria for good measurement quality. This provides a strong foundation to proceed to the structural model evaluation stage (inner model) to test the relationship between constructs.

Inner Model Evaluation (Structural Model)

Structural model evaluation is conducted to assess the strength of the relationship between latent constructs and the overall predictive ability of the model. There are three main indicators used, namely the Determination Coefficient (R^2), Predictive Goodness of Fit (Q^2), and the path coefficient significance test.

1. Coefficient of Determination (R^2)

The coefficient of determination (R^2) is used to measure how much of the variance of the dependent variable can be explained by the independent variables in the model. The R^2 results show:

- WFA Feasibility Perception (Y) has an R^2 value of 0.767, which means that 76.7% of the variance in the perception of WFA feasibility can be explained by the variables Supporting infrastructure (X1), Digital competence (X2), Organizational Support (X3), and Ergonomic Risks (M). Based on the interpretation guidelines from (Hair et al., 2019), this value is included in the strong category, indicating that the model has substantial explanatory power for the Y variable**.**
- In contrast, Ergonomic Risks (M) only has an R^2 value of 0.038, or 3.8%. This means that only a small portion of the variance in Ergonomic Risks can be explained by the Supporting infrastructure, Digital competence, and Organizational Support constructs. This value indicates that there are other factors outside the model that are more dominant in influencing respondents' perceptions of Ergonomic Risks.

2. Goodness of Fit Prediktif (Q^2)

The predictive Q^2 value is obtained from the blindfolding technique and is used to assess the predictive relevance of the model. In this study, the Q^2 value of 0.77 indicates that the model has very good predictive ability, because more than 50% of the data diversity in the indicators can be predicted by the model. This shows that although not all relationships between constructs are significant, the model as a whole remains relevant in predicting the output variable (Y).

3. Hypothesis Testing (Path Coefficient)

Hypothesis testing is done using the bootstrapping method to obtain T-statistics and p-values to test the significance of the relationship between variables. The significance limit is determined by T-statistics > 1.96 and p-value < 0.05. The test results show that:

- Not all paths between variables are statistically significant.
- This suggests the possibility of non-linear relationships, or constructs that have not been fully operationalized optimally.
- However, the direction and strength of the path coefficients still provide important information about the relative contribution of each construct to the perception of WFA feasibility.

Overall, the model has good predictive power for the main variable, namely the perception of Work From Anywhere (WFA) feasibility, but the weakness in explaining the variance of Ergonomic Risks suggests the need for additional exploration of other factors that are more specific to the remote work context, including individual factors, organizational culture, or the physical work environment that are not yet captured in this model.

Summary of Hypothesis Testing Results

Hypothesis testing is conducted to test the causal relationship between latent variables in the research model. Based on the results of the path coefficient analysis and p-value, there are several significant and insignificant, direct and indirect relationships that can be explained as follows:

1. Significant Hypothesis

1) Organizational Support → WFA Feasibility Perception. The coefficient of 0.283 with a p-value = 0.016 indicates that Organizational Support has a positive and significant effect on the perception of the feasibility of implementing Work From Anywhere (WFA). This means that the higher the structural, coaching, and managerial support provided by the

organization, the greater the positive perception of ASN towards the feasibility of implementing WFA. This result is consistent with the findings of Ng et al. (2022) which states that institutional support is an important factor in shaping employee readiness and trust in flexible work systems.

2) Supporting infrastructure → WFA Feasibility Perception. The coefficient of 0.506 with p-value = 0.000 indicates a very significant positive influence between infrastructure readiness (work facilities, digital technology, technical support) and the perception of WFA feasibility. This indicates that adequate infrastructure greatly determines the success of work implementation from anywhere. ASN who have access to good physical and digital infrastructure are more likely to view WFA as a work system that is feasible to implement.

2. Insignificant Hypothesis

1) Organizational Support → Ergonomic Risks. The coefficient of -0.165 with p-value = 0.179 indicates that this relationship is not statistically significant. Although the direction of the negative relationship indicates that increasing Organizational Support tends to decrease the perception of Ergonomic Risks, this influence is not strong enough to be concluded with confidence. This may indicate that the organizational support provided has not specifically targeted ergonomic aspects (e.g., adjustment of work tools at home or workload management).
2) Digital competence → WFA Feasibility Perception. The coefficient value of 0.138 with p-value = 0.209 indicates that digital competence does not have a significant effect on WFA Feasibility Perception. Although the use of technology is a prerequisite for WFA, ASN digital capabilities do not seem to be the main differentiating factor in assessing the feasibility of WFA. Possibly, ASN digital competence has been at a relatively homogeneous basic level, so it does not show significant variation in influence in forming the perception of the feasibility of the work system.
3) Ergonomic Risks → WFA Feasibility Perception. The coefficient of -0.015 with p-value = 0.674 indicates that there is no significant influence between perceived Ergonomic Risks and perception of WFA feasibility. This finding indicates that although some respondents may experience physical or psychosocial discomfort when working from home, these factors are not strong enough to influence their assessment of the feasibility of the flexible work system as a whole. This could happen if the perception of feasibility is more influenced by technological and organizational aspects than physical or psychosocial aspects of work.
4) Supporting infrastructure → Ergonomic Risks. The coefficient of 0.120 with p-value = 0.485 indicates that the relationship between supporting infrastructure and Ergonomic Risks is not statistically significant. This means that the availability of work devices such as laptops and internet connections does not directly reduce or increase Ergonomic Risks. This indicates that technological infrastructure may have a greater impact on productivity or work efficiency, but has not yet reached the physical comfort or health aspects of remote work.
5) Digital competence → Ergonomic Risks. With a coefficient of -0.145 and p-value = 0.351, the effect of digital competence on Ergonomic Risks is also not significant. Although in theory digital skills can help individuals work more efficiently and reduce cognitive load or stress, this finding shows that mastery of technology does not automatically have an impact on physical or mental risks in the context of WFA. This could be because Ergonomic Risks are more related to physical work environment condtions than digital skills.
6) Supporting infrastructure → Ergonomic Risks → WFA Feasibility Perception (H8 - Mediation Path). There is no significant indirect effect because both the relationships X1 → M (p = 0.485) and M → Y (p = 0.674) are not significant. Thus, Ergonomic Risks do not mediate the relationship between infrastructure and WFA perception. This indicates that the availability of infrastructure directly affects the perception of feasibility, without going through the Ergonomic Risks mechanism.

7) Organizational Support → Ergonomic Risks → WFA Feasibility Perception (H9 - Mediation Path). Similar results occur in this path, where the relationships X3 → M (p = 0.179) and M → Y (p = 0.674) are not significant. This means that although Organizational Support directly affects feasibility perception, its effect is not mediated by Ergonomic Risks. It can be concluded that the effectiveness of organizational support is greater in terms of policy or management than in reducing physical or psychological risks during WFA.
8) Digital competence → Ergonomic Risks → WFA Feasibility Perception (H10 - Mediation Path). With the insignificant relationship of X2 → M (p = 0.351) and M → Y (p = 0.674), digital competence does not affect the perception of WFA feasibility indirectly through Ergonomic Risks. This shows that although digital competence is needed in WFA, its influence is not strong enough to reduce physical/psychosocial risks and shape perceptions of feasibility.
9) Direct Effects
Direct effects describe how much direct influence the independent variables (X1, X2, X3) have on the dependent variable (Y) without involving the mediating variable (M). The results of the analysis show:

- **Supporting infrastructure (X1) → WFA Feasibility Perception (Y)**
  - **Coefisient: 0.506 (p = 0.000)** which means that supporting infrastructure has a very significant positive influence on WFA Feasibility Perception. Every increase in one unit of infrastructure is associated with an increase of 0.506 units in WFA Feasibility Perception. This shows that the availability of infrastructure is very important in supporting the implementation of WFA (Work From Anywhere).
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- **Organizational Support (X3) → WFA Feasibility Perception (Y)**
  - **Coefisient: 0.283 (p = 0.016)** which means that Organizational Support has a significant positive influence on WFA Feasibility Perception, although it is weaker than the influence of infrastructure. The effect may be related to non-technical aspects such as flexible policies or training provided by the organization.
- **Digital competence (X2) → WFA Feasibility Perception (Y)**
  - **Coefisient: 0.138 (p = 0.209)**, which originally the influence of digital competence on WFA Feasibility Perception was not significant, with a p-value greater than 0.05. This indicates that digital competence may be considered as an existing basic prerequisite, so it does not have a significant additional influence on the perception of WFA feasibility.

4. Indirect Effects
Indirect relationship measures the influence of X1, X2, and X3 on Y through the mediating variable (Ergonomic Risks, M). The results of the analysis show:

- **Mediation Path X1, X2, X3 → M → Y:**
  - **Ergonomic Risks (M) → WFA Feasibility Perception (Y):**
    - **Coefisient = -0.015 (p = 0.674)**. The results show that Ergonomic Risks do not have a significant effect on WFA Feasibility Perception. P-value greater than 0.05 indicates that Ergonomic Risks cannot mediate the effect between independent variables (X1, X2, X3) and dependent variables (Y). Thus, the mediation effect is not proven to be significant.
- **Specific Analysis per Independent Variable:**

1. **X1 (Infrastructure) → M → Y:**
   - **X1 → M: Coefisient = 0.120 (p = 0.485, non significant)**. There is no evidence that infrastructure influences Ergonomic Risks or that Ergonomic Risks mediate the effect of infrastructure on WFA Feasibility Perception.
2. **X3 (Organizational Support) → M → Y:**
   - **X3 → M: Coefisient = -0.165 (p = 0.179, non significant)**. Although the direction of the effect is negative (Organizational Support may reduce Ergonomic Risks), the effect is

not significant, which means there is no mediating effect of Ergonomic Risks on this relationship.

3. **X2 (Digital competence) → M → Y:**

- **X2 → M: Coefisient = -0.145 (p = 0.351, non significant)**. Digital competence has not been shown to reduce Ergonomic Risks or mediate their effect on WFA Feasibility Perception.

In the direct relationship, supporting infrastructure and Organizational Support have a significant positive effect on WFA Feasibility Perception, while digital competence does not have a significant effect. Meanwhile, in the indirect relationship, Ergonomic Risks failed to mediate the relationship between the independent variables (infrastructure, Organizational Support, digital competence) and WFA Feasibility Perception. This suggests that although Ergonomic Risks may be considered an important factor in the implementation of WFA, it does not function as a significant mediator in this model. Further research is recommended to explore the possibility of non-linear relationships or the role of moderating/mediating variables, as well as deepening the understanding of more specific ergonomic dimensions.

Practical and Theoretical Implications

The results of this study provide a number of relevant practical implications to support the implementation of the Work From Anywhere (WFA) policy in the State Civil Apparatus (ASN) environment. First, the finding that supporting infrastructure has the strongest and most significant influence on the perception of WFA feasibility indicates that the government needs to prioritize the provision of adequate work facilities. This includes stable internet access, ergonomic work devices, and technical support that allows ASN to work effectively from any location. Second, Organizational Support also proved significant, although its influence was smaller. Therefore, government agencies need to develop flexible policies, build a work culture that supports remote work, and provide training to unit leaders so that they are able to manage teams virtually. Third, digital competence which did not show a significant influence indicates that ASN generally already have sufficient basic skills in terms of digital technology, so that further training should be more focused on more specific and applicable technical skills. Finally, although Ergonomic Risks did not have a significant effect on the perception of WFA feasibility, this aspect still needs to be considered. Education regarding the arrangement of ergonomic workspaces at home and the provision of ergonomic guidelines remain important to ensure that ASN occupational health is maintained in the long term.

Theoretically, the results of this study contribute to the development of studies on the adoption of flexible work in the public sector. First, these results strengthen previous findings that infrastructure is a major determinant in shaping perceptions of the feasibility of remote work systems, as explained in the TOE (Technology-Organization-Environment) approach and the UTAUT model. Second, the finding that Ergonomic Risks do not act as a significant mediator opens up space to re-evaluate the relevance of physical mediation factors in the context of ASN, which may be more influenced by structural and policy factors. Third, the insignificance of the influence of digital competence on perceptions of feasibility and Ergonomic Risks indicates that digital competence is no longer a differentiating variable in the context of ASN which is already relatively digitally literate. These findings provide important input for the development of technology adoption theory in public bureaucracy, where the digital competence variable may need to be redefined or repositioned. Fourth, overall, the results of this study indicate that the WFA adoption model in ASN requires a more contextual approach, which considers the typical characteristics of government bureaucracy such as formal regulation, hierarchical work culture, and perceptions of job stability.

CONCLUSION

This study concludes that among the factors examined, **supporting infrastructure** has the most substantial and statistically significant influence on the perceived feasibility of Work From Anywhere (WFA) among civil servants, followed by **organizational support**. In contrast, **digital competence** does not show a significant effect, indicating that individual technical capabilities may not be a primary consideration in evaluating remote work feasibility within the public sector context.

Furthermore, **ergonomic risks** do not significantly impact WFA feasibility perceptions and do not mediate the relationship between the independent variables and WFA perception. All indirect (mediated) effects via ergonomic risks were statistically insignificant ($p > 0.05$), suggesting that ergonomic concerns are not yet a central aspect of remote work considerations among civil servants.

The model proposed in this study explains **76.7% of the variance** in WFA feasibility perception, highlighting the collective strength of the included variables in predicting civil servants' attitudes toward WFA, even though not all variables were individually significant.

From a **practical standpoint**, the findings underscore the importance of ensuring reliable infrastructure such as internet connectivity and access to proper work equipment as a foundational requirement for implementing WFA. Additionally, **organizational support**, particularly through adaptive leadership and flexible policies, plays a critical role in enabling successful remote work adoption.

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DECLARATION OF CONFLICTING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this paper. All research activities were conducted independently, and no financial, personal, or professional relationships influenced the outcomes or interpretations presented in this study. The authors have no competing interests to disclose.

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ABOUT THE AUTHOR(S)

1st Author
Teresa Irmina Nangameka is a lecturer in the Department of Public Sector Human Resource Management at the Institut Pemerintahan Dalam Negeri (IPDN), Indonesia. She currently serves as a *Lektor* (Associate Lecturer) and is a permanent academic staff member. She earned her Master of Applied Governmental Science (*Magister Terapan Ilmu Pemerintahan*) in 2020 and previously completed her Diploma IV at the same institution in 2014. Her academic and professional work focuses on the development and management of human resources in the public sector.

2nd Author
Ira Meiyenti is a lecturer in the Public Finance Study Program at the Institut Pemerintahan Dalam Negeri (IPDN), Indonesia. She holds the academic position of *Lektor* (Associate Lecturer) and is a permanent member of the academic staff. Dr. Meiyenti earned her Doctoral degree (Ph.D.) in Administrative Science from Universitas Gadjah Mada in 2023. She also holds a Master of Science degree from IPDN (2016) and a Bachelor's degree in Governmental Science from the same institution (2014). Her teaching and research activities focus on public finance and administrative governance.

3rd Author
Citra Caturani is an undergraduate student at the Institut Pemerintahan Dalam Negeri (IPDN), Indonesia, enrolled in the Diploma IV Program in Public Sector Human Resource Management. She began her studies on July 1, 2022, and is currently active in the even semester of the 2024/2025 academic year. Her academic interests focus on public sector governance and human resource development.
Email: citracccaturani00@gmail.com

4th Author
Yoga Haganta Ginting is an undergraduate student at the Institut Pemerintahan Dalam Negeri (IPDN), Indonesia, currently enrolled in the Diploma IV Program in Public Sector Human Resource Management. He started his academic journey on July 1, 2022, and remains an active student in the even semester of the 2024/2025 academic year. His academic interests include public sector personnel development and organizational management.