

Enhancing digital motivation work and its effect on digital target-based employee performance at regional revenue agency of DKI Jakarta province

Muhamad Abrar Saputrabey^{1*}, Yuke Sepriyanti², Riyanto³, Anoesyirwan Moeins⁴, Yuli Zen⁵

^{1,2,3,4,5}Universitas Persada Indonesia Y.A.I – Jakarta, Indonesia; Muhamad.Abrar.2266390017@upi-yai.ac.id (M.A.S.)

Yuke.2266390004@upi-yai.ac.id (Y.S.) Riyanto.2166390028@upi-yai.ac.id (R.) anoesyirwan.moeins@upi-yai.ac.id (A.M.)

yuli.zain@upi-yai.ac.id (Y.Z.).

Abstract: This study aims to examine the influence of digital work motivation and adaptability on employee performance based on digital targets at the Regional Revenue Agency (Bapenda) of DKI Jakarta Province in the context of digital transformation. Using quantitative methods and a survey approach, this study involved 249 employees selected through proportionate random sampling techniques. The results showed that technology support, work flexibility and freedom, and digital-based work-life balance have a significant effect on digital work motivation, which ultimately increases employees' digital adaptability. This adaptability plays an important role in improving performance oriented towards digital targets, with flexibility in dealing with technological changes as a moderating factor that strengthens the relationship between operational capabilities and digital adaptability. These findings emphasize the importance of integrating technology with flexible work policies to improve employee motivation, adaptability, and performance in the public sector. This study provides a practical contribution to government agencies in designing more effective and optimal digitalization strategies.

Keywords: *Digital adaptability, Digital target based performance, Digital transformation, Digital work motivation, Technology support, Work flexibility.*

1. Introduction

In the era of shifting towards digitalization, many organizations are starting to utilize technology to improve the effectiveness of performance management. This approach not only allows for real-time performance monitoring, but also helps management provide more accurate and faster feedback, according to employee achievement against measurable targets. With a digital-based target system, organizations can align individual goals with the company's strategic goals, facilitating transparency, accountability, and more effective employee development. With the increasing development of digital-based target systems, organizations are required to not only ensure effective target achievement, but also maintain employee work motivation to remain high in a work environment that continues to adapt to technology.

Employee work motivation has shifted towards digitalization aspects that support flexibility and efficiency in achieving organizational targets [1, 2]. The integration of digital technology into work increases motivation in several ways, including technological support, freedom in working, and better work-life balance [3]. Public organizations also face similar challenges in optimizing employee performance through technological adaptation, which also demands a high level of adaptability from employees to respond to digital changes [4]. However, technology alone is not enough; good digital adaptability is needed, namely the ability of employees to respond and adapt quickly to new systems implemented in daily work routines [5].

Digital adaptability is crucial for employees, especially in bureaucratic environments that tend to have rigid and hierarchical processes [6]. The ability to adapt to new technologies allows employees to remain

relevant and productive despite the ever-evolving systems, especially with the implementation of digital-based work systems that require fast responses and strong technical skills [7]. This adaptability also impacts the smoothness of internal processes, allowing organizations to respond to external changes efficiently and effectively [8].

As a public organization that has a strategic role in managing regional revenue, the Regional Revenue Agency (Bapenda) of DKI Jakarta Province faces an increasingly urgent need to adapt to digital developments. Digital adaptability is no longer just an additional need, but a necessity in facing the increasing complexity of tasks and targets. The implementation of digital technology in Bapenda, such as an online-based revenue management system and real-time data tracking, is expected to improve service efficiency and accountability. However, adapting to this technology poses challenges for employees, who now need to master new digital skills and adapt to ever-evolving system changes. Some employees face difficulties in integrating technology into daily work processes, which has the potential to affect productivity and service quality. To understand more deeply, this study also analyzed the results of a performance survey of 50 Bapenda DKI Jakarta employees, which are presented in Figure 1.

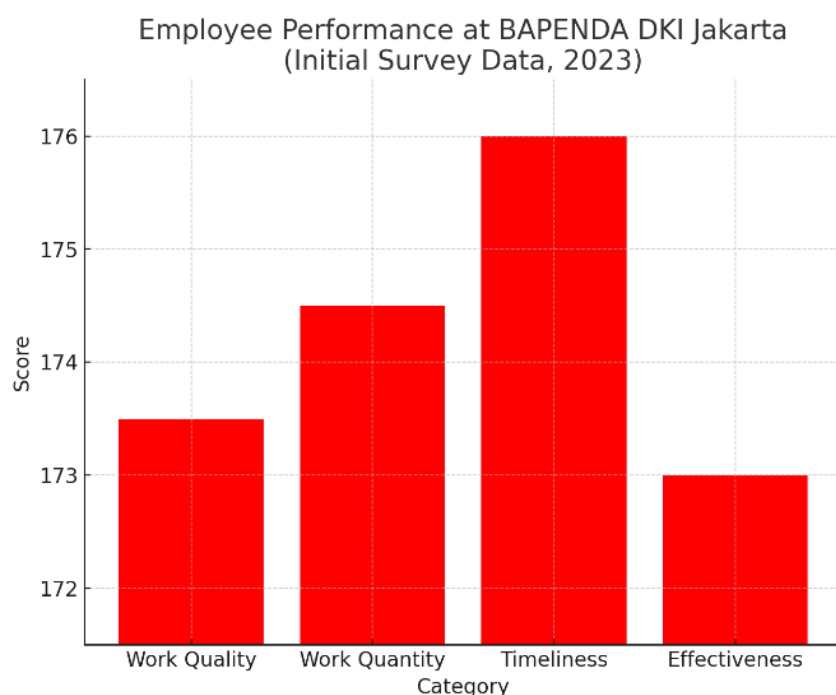


Figure 1.

Performance of BAPENDA DKI Jakarta employees.

Note: $n = 50$ employees, scale 1 to 5, so the highest score is $(50 \times 5 = 250)$ and the lowest score is $(50 \times 1 = 50)$.

Source: Initial Observation Results (2023)

Lowest $(50 \times 1 = 50)$, so the standard score is $(250/2 + 50 = 175)$. Zikmund [9] Figure 1 shows the results of initial observations on employee performance at Bapenda DKI Jakarta, which reflect that several aspects of performance are still below the expected standard. From the data collected on 50 employees, the scores on the dimensions of work quality (173.50), work quantity (174.50), and effectiveness (173.00) tend to be lower than the ideal standard (175). Only the punctuality aspect achieved the highest score of 176, indicating that employees are able to complete tasks within the specified time limit. This phenomenon indicates that, although employees are able to work on time, the quality and effectiveness of work results still need improvement. Low scores on these particular aspects can be an indicator that employee work

motivation and digital adaptability are not optimal. This is very relevant to the focus of this study, which aims to identify the extent to which digital-based work motivation and adaptability to new technologies contribute to employee performance in the public bureaucracy environment.

Most previous studies have explored the impact of digitalization on organizational performance in general, but have paid little attention to the aspects of digital work motivation and technology adaptability in the public sector, especially in bureaucracies that tend to be rigid. The public sector has unique characteristics compared to the private sector, where digital change is often hampered by bureaucratic procedures and strong hierarchical structures [10, 11]. On the one hand, research by Janssen, et al. [12] shows that digital technology can improve the efficiency of public services, but employees often feel overwhelmed in adapting to new technologies, leading to resistance to change. On the other hand, research by Bretschneider, et al. [13] shows that work motivation in the public sector is influenced by different factors than in the private sector, but they have not discussed in depth the role of digital motivation in improving employee performance.

Furthermore, research by Mergel, et al. [14] emphasized that digital skills development in the public sector is often hampered by a lack of appropriate training, creating a gap between employees' expected and actual capabilities. However, this study did not address the impact of digital adaptability directly on individual performance. In addition, a study by Venkatesh, et al. [15] suggested that adaptability to technology affects job satisfaction and productivity, but the study focused more on the private sector which has greater flexibility in implementing technology.

This study will fill the gap by focusing on the unique combination of digital work motivation and digital adaptability in the public bureaucratic structure, especially in Bapenda DKI Jakarta. With the characteristics of a bureaucracy that tends to be slow in responding to technological changes, there is an urgent need to understand how digital motivation and adaptability can improve employee performance in this sector. This study aims to examine not only the direct impact of digital work motivation and technological adaptability, but also how the two factors can work synergistically in improving employee performance. Thus, this study is expected to provide practical contributions to government agencies in designing more effective strategies to optimize the potential of digitalization in the public sector.

2. Literature Review

2.1. Digital Work Motivation

Digital work motivation has become a major concern in the digital era, where technology is changing the way employees work and interact. Many studies have shown that digital technology not only increases productivity but also plays a role in shaping employee work motivation. As a motivational element, technology can support efficiency, reduce administrative workloads, and enable employees to work more flexibly [16, 17]. This transformation is especially important in the public sector, such as Bapenda DKI Jakarta, where the use of technology is often associated with the goal of improving service quality and employee work effectiveness. This study aims to understand how digital work motivation affects employee performance, focusing on Technology Support in Work, Work Freedom and Flexibility, and Digital-based Work-Personal Balance.

Technology Support in Work is one of the important components of digital work motivation. This support includes adequate technological infrastructure, training for the use of digital systems, and the availability of tools that support the implementation of daily tasks. Based on research by Salas-Vallina, et al. [18] technology that supports employee work provides a sense of confidence and accelerates task completion, which ultimately contributes to higher motivation. In the public sector, technological support allows employees to access data in real time and speed up administrative processes, which improves the efficiency and quality of public services [19]. However, if this support is lacking, employees often feel frustrated and exhausted, which can reduce their work motivation [20].

Furthermore, Work Freedom and Flexibility also play an important role in digital work motivation. Technology allows employees to work flexibly, both in terms of time and place. The freedom to set work schedules and work location choices gives employees greater autonomy, which according to research by

Kossek, et al. [21] greatly influences employee job satisfaction and motivation. This flexibility has been shown to increase productivity and allows employees to manage their workload more effectively [22]. At Bapenda, which has a strict bureaucracy, digital flexibility allows employees to be more responsive to change without having to be tied to rigid working hour rules. This creates a more adaptive and responsive work environment, which is very relevant amidst demands to improve the quality of public services.

In addition, Digital-based Work-Personal Balance is also a significant factor that drives digital work motivation. When technology supports work-life balance, employees tend to have higher levels of satisfaction, which contributes to motivation and loyalty to the organization [23]. Technology allows employees to manage work from home or elsewhere, reducing the pressure to always be physically present in the office. A study by Derks, et al. [24] found that employees who can self-manage when and where they work have lower stress levels and better work-life balance. In the public sector, this helps reduce burnout and encourages employee engagement in long-term tasks [25].

Digital work motivation, consisting of technology support, work freedom, and work-personal balance, shows great potential in improving employee performance in the public sector. These three elements work synergistically, creating a more efficient, flexible, and supportive work environment for employee well-being. The following are the hypotheses in developing this variable.

H₁: Technology Support in Work has a positive effect on digital work motivation.

H₂: Work Freedom and Flexibility have a positive effect on digital work motivation

H₃: Digital-based Work-Personal Balance has a positive effect on digital work motivation.

2.2. Employee Digital Adaptability

Employee digital adaptability is becoming increasingly important in the era of digitalization, especially when organizations are intensively adopting technology to improve efficiency and productivity. This adaptability refers to the ability of employees to adapt quickly to new technologies, both in understanding how they work and in integrating them into daily tasks [26]. As an evolving concept, digital adaptability encompasses various dimensions, including operational capabilities in using applications and work systems and employee flexibility in responding to ever-evolving technological changes [27]. In the context of public organizations, such as the Regional Revenue Agency (Bapenda), digital adaptability plays an important role in ensuring that employees can meet the demands of efficiency and transparency expected from public services.

Ability to Operate Work is a basic element of employee digital adaptability. This ability includes technical knowledge and skills to operate software and systems used in daily work, such as data management software or web-based administration applications. According to research by Fang, et al. [28] this ability greatly influences employee work effectiveness because it helps them complete tasks faster and more accurately. In addition, research by Sun, et al. [29] shows that employees who have good technical skills in operating work applications tend to have higher levels of digital adaptability because they feel more confident in using technology. In the public sector, the ability to operate complex work applications is becoming increasingly crucial because the bureaucratization process demands accuracy and precision in data management [30].

On the other hand, Flexibility in Responding to Technological Changes plays a role as a moderating variable that influences the relationship between employees' technical skills and their digital adaptability. This flexibility refers to the ability of employees to adapt to evolving technologies, such as when an organization introduces a new system or updates the software used [31]. According to research by Martin, et al. [32] employees who have high flexibility in responding to technological changes tend to be more adaptable to new systems, because they are open to learning and change. This flexibility can help moderate the effect of technical skills on digital adaptability, because flexible employees will find it easier to navigate challenges that may arise from new technologies [15]. In an ever-changing environment such as the public sector, the ability to adapt to technological changes is important to maintain smooth operations and ensure that employees can meet the service standards expected by the public.

The combination of technical skills in operating work systems and applications, and flexibility in responding to technological changes, form the basis of employee digital adaptability. This study seeks to understand how these two factors contribute to digital adaptability among public sector employees, particularly in Bapenda DKI Jakarta. By highlighting the role of flexibility as a moderator, this study provides a new perspective in examining how employees can be more effective in facing digital transformation in a bureaucratic work environment. The following are the hypotheses in developing this variable:

H₅: Digital work motivation has a positive effect on Employee Digital Adaptability

H₆: Ability to Operate Work has a positive effect on Employee Digital Adaptability

H₇: Flexibility in Responding has a positive effect on Employee Digital Adaptability

H₈: Flexibility in Responding strengthens the relationship between Ability to Operate Work and Employee Digital Adaptability

H₉: Employee Digital Adaptability has a positive effect on Digital Target-Based Employee Performance

2.3. Employee Performance Based on Digital Targets

Digital target-based employee performance is increasingly becoming a major focus of organizations in the era of digital transformation, especially in the public sector, which seeks to improve efficiency and accountability through technology. This performance refers to the ability of employees to achieve work targets supported by the use of digital technology, such as real-time data management, application-based services, and automated reporting [33]. According to research by Devaraj and Kohli [34] digital technology can increase employee productivity by enabling them to work faster and more accurately, making it easier to achieve organizational targets. However, success in achieving digital targets is highly dependent on employee readiness and ability to adapt to technology, which is the focus of this study.

The independent variable in this study, namely Digital Work Motivation, plays an important role in driving digital target-based performance. Motivation derived from technological support in work, work freedom and flexibility, and digital-based work-personal balance allows employees to feel more comfortable and motivated in utilizing technology to achieve their set targets [35]. When employees feel supported by technology and have flexibility in how they work, they tend to have higher job satisfaction and are more motivated to achieve targets, including in using digital technology as a primary tool [36].

In addition to motivation, the intervening variable in this study, namely Employee Digital Adaptability, also has a significant role in influencing digital target-based performance. Digital adaptability includes employees' ability to operate work systems and applications, as well as flexibility in responding to technological changes. According to a study by Jundt, et al. [37] employees who are able to adapt quickly to technological changes show better performance because they can overcome the challenges of ever-growing digitalization. Flexibility in dealing with technological changes also acts as a moderator that strengthens the relationship between employee technical abilities and digital adaptability, which ultimately impacts digital target-based performance [38].

Thus, the performance of digital target-based employees at Bapenda DKI Jakarta is not only determined by technical skills in operating technology, but also by the level of digital work motivation and adaptability in responding to change. High digital work motivation and good adaptability enable employees to utilize technology optimally in achieving the expected targets. This study seeks to explore the relationship between digital work motivation, digital adaptability, and digital target-based performance in the public sector, which has unique bureaucratic and procedural challenges. The following are the hypotheses in developing this variable:

H₅: Technology Support in Work has a positive effect on Digital Target-Based Employee Performance through Digital Work Motivation and Employee Digital Adaptability.

H₆: Work Freedom and Flexibility have a positive effect on Digital Target-Based Employee Performance through Digital Work Motivation and Employee Digital Adaptability.

H₇: Digital-based Work-Personal Balance has a positive effect on Digital Target-Based Employee Performance through Digital Work Motivation and Employee Digital Adaptability.

H₁₂: Digital work motivation has a positive effect on Digital Target-Based Employee Performance through Employee Digital Adaptability.

The following is the framework of thought in this research:

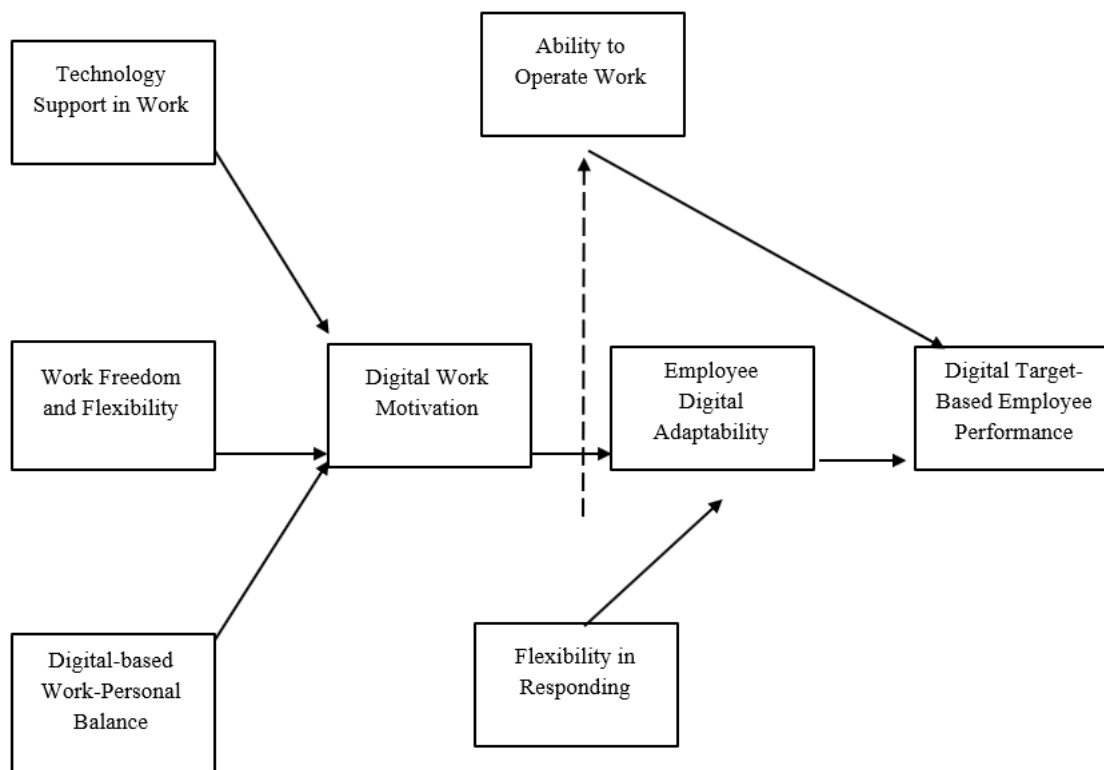


Figure 2.
Framework of thought.

3. Implementation Method

This study uses a quantitative research design to measure the relationship between digital work motivation variables, digital adaptability, and employee performance based on digital targets. This approach allows for a measurable analysis of the relationship between variables through primary data collected using a structured questionnaire. The study population includes employees with executive positions at the Regional Revenue Agency (Bapenda) of DKI Jakarta Province, totaling 661 employees in five regions, as identified based on specific characteristics to understand the factors that influence their performance in a digital context.

Due to the large population size, this study uses a sampling method to obtain representative results. According to Sugiyono [39] a sample is a part of a population that has certain characteristics and is able to represent the entire population. Using the Slovin formula with an error rate of 5%, a sample of 249 respondents was determined from a total of 661 employees at the Regional Revenue Agency (Bapenda) of DKI Jakarta Province. The probability sampling technique with the proportionate random sampling method was applied, providing an equal opportunity for each element of the population to be selected, while ensuring the proportions that are in accordance with the characteristics of the population. This approach aims to obtain an accurate sample and represent the population as a whole.

Table 1.
Population and sample of DKI BAPENDA employees by work area.

No	Work area name	Population	Sample
1	Central Jakarta	121	$(121/661) \times 249 = 46$
2	West Jakarta	128	$(128/661) \times 249 = 48$
3	North Jakarta & thousand islands	109	$(109/661) \times 249 = 41$
4	South Jakarta	158	$(158/661) \times 249 = 59$
5	East Jakarta	145	$(145/661) \times 249 = 55$
	Total	Total 661	249

Source: Personnel Section of BAPENDA DKI Jakarta.

This study uses primary and secondary data to obtain a comprehensive understanding of employee performance at the Regional Revenue Agency (Bapenda) of DKI Jakarta Province. Primary data were obtained through interviews, direct observation, and questionnaires distributed to respondents, while secondary data were collected from literature, including journals, and other documents relevant to employee performance management and labor cost efficiency. Data collection methods consisted of field research and literature review. Data analysis was carried out using the Smart PLS tool to test validity, reliability, R Square, and discriminant validity, to ensure that the measurement instrument provides accurate and consistent results. In addition, bootstrapping testing was applied to understand the effect of independent variables on dependent variables, strengthen the accuracy of the analysis results, and explore the relationship between variables in this study.

4. Results and Discussion

The initial step in this study involves testing the validity and reliability to ensure that the instruments used are accurate and consistent in measuring the variables studied. Next, an R Square analysis is conducted to assess the extent to which the independent variables contribute to the dependent variables in the research model, ensuring that the relationships between variables have sufficient strength and significance. This analysis as a whole aims to improve the reliability of the model and provide a strong foundation for the research results.

Table 2.
Construct validity and reliability.

Variables	Cronbach's alpha	Rho A	Composite reliability	(AVE)
AOW*FR->EDA	1,000	1,000	1,000	1,000
Ability to operate work	0.852	0.872	0.909	0.770
Digital target-based employee performance	0.722	0.723	0.878	0.782
Digital work motivation	0.837	0.842	0.902	0.754
Digital-based work-personal balance	0.779	0.779	0.900	0.819
Employee digital adaptability	0.932	0.932	0.967	0.936
Flexibility in responding	0.853	0.867	0.910	0.770
Technology support at work	0.700	0.729	0.868	0.767
Work freedom and flexibility	0.779	0.872	0.868	0.692

Construct validity and reliability testing was conducted to ensure that the instruments used have reliability and consistency in measuring the variables studied, such as Ability to Operate Work, Digital Target-Based Employee Performance, Digital Work Motivation, and others. The test results showed that all constructs had a Cronbach's Alpha value above 0.7, indicating high internal reliability [40]. Composite reliability which was also above 0.7 indicated strong consistency between construct indicators. The Average Variance Extracted (AVE) value which was mostly above 0.5 indicated good convergent validity, indicating that the variables in this study can be adequately explained by their indicators [41]. For

example, the Employee Digital Adaptability construct had a Cronbach's Alpha value of 0.932 and an AVE of 0.936, reflecting that the Employee Digital Adaptability measurement was very reliable and valid. This is in line with previous studies that emphasize the importance of reliability and validity in measuring digital adaptability and digital-based work motivation in the public sector [15, 26]. These results indicate that the measurement instrument can be trusted to identify the influence of digital motivation, flexibility, and operational capabilities on digital target-based performance at Bapenda DKI Jakarta.

Table 3.

R square.

Variables	Adjusted R square	R square
Digital target-based employee performance	0.503	0.493
Digital work motivation	0.645	0.623
Employee digital adaptability	0.813	0.797

The R Square value in Table 3 shows the magnitude of the influence of the independent variables on the dependent variables in this research model. DT-BEP has an R Square value of 0.503, which means that around 50.3% of the variation in employee digital target-based performance can be explained by the variables used in the model, while the rest is influenced by other factors outside this model. Digital Work Motivation has an R Square value of 0.645, indicating that 64.5% of the variation in digital work motivation is explained by the factors that influence it. Meanwhile, Employee Digital Adaptability has an R Square value of 0.813, meaning that 81.3% of the variation in employee digital adaptability can be explained by the relevant independent variables. The Adjusted R Square value which is only slightly lower than R Square indicates that the model has stable predictive power even considering the number of independent variables. These findings indicate that variables such as technology support, digital work motivation, and flexibility in responding to technological changes have a significant contribution in explaining employee performance and adaptability in the DKI Jakarta Regional Revenue Agency (Bapenda), in accordance with the theory of technology adaptation and work motivation in the context of digital transformation [15].

Table 4.

Discriminant validity test.

Variables	AOW*FR->EDA	AOW	DT-BEP	DWM	DB-PB	EDA	FR	TSW	WFF
AOW*FR->EDA	1.000								
AOW	-0.044	0.877							
DT-BEP	0.069	0.833	0.885						
DWM	0.100	0.581	0.559	0.868					
DBW-PB	0.109	0.692	0.643	0.785	0.905				
EDA	-0.241	0.742	0.709	0.652	0.613	0.967			
FR	0.035	0.644	0.803	0.572	0.594	0.793	0.878		
TSW	0.094	0.760	0.857	0.508	0.621	0.677	0.697	0.876	
WFF	-0.078	0.858	0.811	0.636	0.662	0.738	0.730	0.730	0.832

Discriminant validity test, based on Fornell-Larcker criteria, was conducted to ensure that each construct in this study is unique and sufficiently different from other constructs. This test is essential to ensure that constructs such as Ability to Operate Work (AOW), Digital Target-Based Employee Performance (DT-BEP), Digital Work Motivation (DWM), and Employee Digital Adaptability (EDA) are measured accurately, capturing only the intended dimensions. The table shows that the square root of AVE for each construct (diagonal values) is higher than its correlation with other constructs, indicating strong discriminant validity [41]. For example, EDA has a square root of AVE of 0.967, which is higher than its correlation with other constructs, confirming its uniqueness. These results are consistent with

previous studies that emphasize the importance of discriminant validity to distinguish between constructs, especially in studies on digital adaptability and digital work motivation in public sector organizations [15, 26]. These findings support the reliability and accuracy of the constructs used in assessing the impact of DWM and EDA on DT-BEP at Bapenda DKI Jakarta, ensuring that each construct independently contributes to the research framework.

After conducting validity, reliability, and R Square analysis tests to ensure the reliability and contribution of variables in the research model, the next step is to conduct hypothesis testing. Hypothesis testing aims to determine whether the relationship between independent variables such as DWM, AOW, and Flexibility in Responding (FR) has a significant effect on dependent variables such as DT-BEP and EDA. This process will use appropriate statistical methods, such as regression analysis or SEM (Structural Equation Modeling), to evaluate the level of significance of the existing influence. The results of this test will help confirm or reject the proposed hypothesis, providing a strong basis for understanding how digitalization factors contribute to employee performance at Bapenda DKI Jakarta.

Here is a picture of the hypothesis testing:

Table 5.

Direct effects.

Hypothesis	Original sample	Sample mean	Standard deviation	T statistics	P values
TSW -> DWM	-0.106	-0.101	0.104	1,020	0.308
WFF -> DWM	0.269	0.309	0.145	1,851	0.064
DBW-PB -> DWM	0.673	0.637	0.149	4,519	0,000
DWM -> EDA	0.239	0.258	0.119	2,006	0.045
AOW -> EDA	0.278	0.259	0.126	2,208	0.027
FR -> EDA	0.487	0.476	0.130	3,740	0,000
EDA -> DT-BEP	0.709	0.715	0.082	8,701	0,000
AOW*FR->EDA	-0.266	-0.219	0.084	3,165	0.002

The results of the direct effect test in this study provide in-depth insights into the role of various factors in supporting DWM, EDA, and DT-BEP. First, Technology Support in Work (TSW) did not show a significant direct effect on DWM ($p = 0.308$), indicating that technology support alone is not enough to directly motivate employees in a digital context. In contrast, Work Freedom and Flexibility (WFF) gave a nearly significant positive effect on DWM ($p = 0.064$), supporting the findings of Kossek, et al. [21] who highlighted the importance of flexibility in increasing motivation in a rapidly changing work environment. Bapenda DKI Jakarta should consider strengthening flexibility in work policies to increase employee digital motivation.

Furthermore, Digital-based Work-Personal Balance (DBW-PB) has a very significant effect on DWM ($p < 0.001$), in line with Derks, et al. [24] who found that work-life balance plays a role in increasing motivation and job satisfaction. The implication of this finding is that policies to support employee work-personal balance through a digital approach can contribute positively to employee motivation, which is very important in their adaptation process to technological change.

The motivation built from these variables plays a significant role in increasing EDA ($p = 0.045$), strengthening the view of Pulakos, et al. [26] that motivation plays an important role in individual adaptability. This implies that Bapenda DKI Jakarta must prioritize strategies that not only increase digital motivation but also build employee resilience to technological change. In addition, AOW has a significant effect on EDA ($p = 0.027$), supporting the research of Fang, et al. [28] which states that technical and operational skills are important in facing technological transformation. Bapenda DKI Jakarta can invest more in digital-based operational training to improve employee readiness in facing change.

Meanwhile, FR has a very significant effect on EDA ($p < 0.001$), indicating the importance of flexibility in responding to technological changes. This strengthens the findings of Martin, et al. [32]

and Venkatesh, et al. [15] which emphasize that flexibility in responding to change is the key to employee adaptation to a dynamic work environment. In addition, this flexibility also acts as a moderator, strengthening the relationship between AOW and EDA ($p = 0.002$). Bapenda DKI Jakarta needs to encourage a flexible work culture so that employees are more prepared to respond quickly to technological developments.

Finally, EDA showed a significant effect on DT-BEP ($p < 0.001$), supporting [37] study which stated that adaptability to technology is correlated with higher productivity. This implies that investment in developing employee EDA will have a significant impact on digital-based target performance, making employees more effective in achieving their set goals. Overall, these findings suggest that Bapenda DKI Jakarta should focus on supporting policies that pay attention to work flexibility, work-life balance, and operational skills development to strengthen DWM and EDA. This strategy will encourage the achievement of optimal DT-BEP in facing digital transformation in the public sector.

The following are the results of the indirect effect test presented in table form:

Table 6.

Indirect effects.

Hypothesis	Original sample	Sample mean	Standard deviation	T statistics	P values
TSW -> DWM -> EDA -> DT-BEP	0.197	0.189	0.100	1,979	0.048
WFF -> DWM -> EDA -> DT-BEP	0.345	0.340	0.100	3,436	0.001
DBW-PB -> DWM -> EDA -> DT-BEP	0.114	0.112	0.052	2,195	0.028
DWM -> EDA -> DT-BEP	0.170	0.181	0.081	2,087	0.037

The results of this study indicate that DWM and EDA play an important role in improving DT-BEP in the work environment, especially in the public sector. The influence of TSW on employee performance through DWM and EDA channels highlights the importance of technological infrastructure that not only supports daily operations but also serves as a motivational driver. This is consistent with the research of Piccolo, et al. [42] which found that technology plays a crucial role in improving employee motivation and adaptability to new technologies. The implication is that technology investment at Bapenda DKI Jakarta can have an impact on improving employee performance and adaptation in the digital environment.

In addition, the effect of WFF on DT-BEP through DWM and EDA showed a significant impact, with a lower p value, reinforcing the findings of Gajendran and Harrison [43]. This implies that flexibility provided to employees, especially in the form of work policies that support a balance between personal and work responsibilities, is very valuable in the public sector which is often rigid in work structures. Providing such flexibility can increase employee motivation to adapt to new technologies, which ultimately has a positive impact on achieving performance targets.

Furthermore, DBW-PB has a significant effect on DT-BEP through DWM and EDA. This finding is in line with the research of Allen, et al. [44] which shows that a good balance between personal life and work increases employee engagement and productivity. The implication of this finding is that Bapenda DKI Jakarta should consider policies that support work-personal balance to maintain employee motivation and their ability to adapt, especially amidst the demands of rapid digital transformation.

Finally, the direct effect of DWM on EDA in improving DT-BEP confirms the role of motivation as a key driver of adaptability in the digital environment. This finding supports the literature from Deci, et al. [45] which shows the importance of intrinsic motivation in encouraging employees to face the ever-evolving work challenges. The implication is that DWM can be viewed as a strategic factor in human resource management in the public sector, where motivated employees have a better ability to adapt to technology and achieve expected performance targets.

This study shows that the integration of TSW, WFF, and DBW-PB can improve DWM and EDA in facing digital changes, which ultimately improves their performance. This strategy is in line with the

findings of Parker, et al. [46] which emphasizes that motivation and adaptability are the keys to success in facing dynamic changes in the work environment. Thus, Bapenda DKI Jakarta is expected to design policies that take these factors into account to achieve optimal DT-BEP in the context of public sector digitalization.

5. Conclusion

The results of this study indicate that DWM, EDA, and TSW play an important role in improving DT-BEP, especially in the public sector such as Bapenda DKI Jakarta. Factors such as WFF, DBW-PB, and employee ability to respond effectively to technological changes have been shown to have significant contributions to DWM and EDA. This finding confirms that the integration of TSW supported by flexible work policies and work-life balance can encourage employees to be more adaptive and productive in the digital era. Therefore, a successful digital transformation strategy should focus on improving DWM and developing employee adaptive capabilities (EDA) to achieve optimal DT-BEP.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Copyright:

© 2025 by the authors. This open-access article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

References

- [1] S. J. Hogan and L. V. Coote, "Organizational culture, innovation, and performance: A test of Schein's model," *Journal of Business Research*, vol. 67, no. 8, pp. 1609-1621, 2014. <https://doi.org/10.1016/j.jbusres.2013.09.007>
- [2] A. Ahmad, A. Jameel, and H. Halim, "Factors influencing employee motivation in public organizations: A study from Malaysia," *International Journal of Business and Society*, vol. 20, no. 1, pp. 23-38, 2019. <https://doi.org/10.33736/ijbs.1928.2019>
- [3] B. Meyer, H. Zimmermann, and M. Riederer, "Effects of digital transformation on employee motivation: A study in the German manufacturing sector," *Journal of Business Research*, vol. 117, pp. 184-195, 2020. <https://doi.org/10.1016/j.jbusres.2020.06.016>
- [4] N. Saha and A. Gregar, "Human capital, organizational change and innovative capability: A theoretical model," *Journal of Business Research*, vol. 92, pp. 193-203, 2018. <https://doi.org/10.1016/j.jbusres.2018.07.015>
- [5] Y. Gong, T.-Y. Kim, D.-R. Lee, and J. Zhu, "A multilevel model of team goal orientation, information exchange, and creativity," *Academy of Management Journal*, vol. 56, no. 3, pp. 827-851, 2013. <https://doi.org/10.5465/amj.2011.0329>
- [6] Á. Díaz-Chao, J. Sainz-González, and J. Torrent-Sellens, "Transforming workplace collaboration through digital capabilities: Impacts on innovation and productivity," *Technology Analysis & Strategic Management*, vol. 33, no. 1, pp. 83-97, 2021. <https://doi.org/10.1080/09537325.2020.1758962>
- [7] M. Wang and Q. Zheng, "Digital transformation and employee job performance: A study in high-tech enterprises," *Technological Forecasting and Social Change*, vol. 157, p. 120066, 2020. <https://doi.org/10.1016/j.techfore.2020.120066>
- [8] F. Cruz-Jesus, M. R. Vicente, F. Bacao, and T. Oliveira, "The education-related digital divide: An analysis for the EU-28," *Computers in Human Behavior*, vol. 56, pp. 99-110, 2019. <https://doi.org/10.1016/j.chb.2015.11.040>
- [9] W. G. Zikmund, *Business research methods*, 8th ed. South-Western Cengage Learning, 2010.
- [10] T. Bovaird, "Efficiency in public administration: From pure output to public value creation," *International Review of Administrative Sciences*, vol. 80, no. 1, pp. 15-35, 2014. <https://doi.org/10.1177/0020852313511512>
- [11] A. Meijer and M. P. R. Bolívar, "Governing the smart city: A review of the literature on smart urban governance," *International Review of Administrative Sciences*, vol. 82, no. 2, pp. 392-408, 2016. <https://doi.org/10.1177/0020852314564308>
- [12] M. Janssen, Y. Charalabidis, and A. Zuiderwijk, "Benefits, adoption barriers and myths of open data and open government," *Information Systems Management*, vol. 29, no. 4, pp. 258-268, 2012. <https://doi.org/10.1080/10580530.2012.716740>
- [13] S. Bretschneider, P. Marc-Antoine, and B. Bozeman, "Public values in complex governance networks," *Public Administration Review*, vol. 75, no. 2, pp. 303-314, 2015. <https://doi.org/10.1111/puar.12356>

- [14] I. Mergel, N. Edelmann, and N. Haug, "Defining digital transformation: Results from expert interviews," *Government Information Quarterly*, vol. 36, no. 4, p. 101385, 2019. <https://doi.org/10.1016/j.giq.2019.06.002>
- [15] V. Venkatesh, J. Y. L. Thong, and X. Xu, "Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology," *MIS Quarterly*, vol. 45, no. 1, pp. 43-78, 2021. <https://doi.org/10.25300/MISQ/2021/13903>
- [16] N. Chesley, "Information and communication technology use, work intensification, and employee strain and stress: A comparative study," *Work, Employment and Society*, vol. 28, no. 4, pp. 589-610, 2014. <https://doi.org/10.1177/0950017013500112>
- [17] Q. A. Nisar and M. I. Rasheed, "Impact of responsible leadership on performance: The mediating role of employee turnover intentions and employee voice," *Sustainability*, vol. 12, no. 16, p. 6767, 2020. <https://doi.org/10.3390/su12166767>
- [18] A. Salas-Vallina, J. Alegre, and R. Fernández, "Happiness-oriented leadership and its relationship with organizational citizenship behaviors and employee innovation.," *Journal of Business Research*, vol. 120, pp. 243-253, 2020. <https://doi.org/10.1016/j.jbusres.2020.08.017>
- [19] M. Magni, C. Paolino, L. Caporarello, and P. Di Nauta, "How to train employees to cope with digital transformation? The role of ICT competencies and Trust in IT," *Management Research Review*, vol. 41, no. 1, pp. 93-113, 2018. <https://doi.org/10.1108/MRR-02-2017-0050>
- [20] V. Vuori, N. Helander, and J. Okkonen, "Digitalization in knowledge work: The dream of enhanced performance," *Cognition, Technology & Work*, vol. 21, no. 2, pp. 237-252, 2019. <https://doi.org/10.1177/1833358318768701>
- [21] E. E. Kossek, L. B. Hammer, E. L. Kelly, and P. Moen, "Designing work, family & health organizational change initiatives," *Organizational Dynamics*, vol. 44, no. 2, pp. 119-130, 2015. <https://doi.org/10.1016/j.orgdyn.2015.02.002>
- [22] J. G. Caillier, "Do work-related factors influence the desire to telework?," *Public Organization Review*, vol. 16, no. 4, pp. 425-441, 2016. <https://doi.org/10.1007/s11115-015-0327-3>
- [23] A. Gregory, S. Milner, and J. Windebank, "Work-life balance in times of austerity and beyond: A challenge for gender equality in Europe?," *European Journal of Industrial Relations*, vol. 19, no. 3, pp. 221-232, 2013. <https://doi.org/10.1177/0959680113493772>
- [24] D. Derks, A. B. Bakker, P. Peters, and P. van Wingerden, "Work-related ICT use outside of regular work hours, employee work-life balance and the role of recovery experiences," *Work & Stress*, vol. 28, no. 4, pp. 347-361, 2014. <https://doi.org/10.1080/02678373.2014.971220>
- [25] M. Mazmanian, W. J. Orlikowski, and J. Yates, "The autonomy paradox: The implications of mobile email devices for knowledge professionals," *Organization Science*, vol. 24, no. 5, pp. 1337-1357, 2013. <https://doi.org/10.1287/orsc.1120.0806>
- [26] E. D. Pulakos, D. W. Dorsey, and W. C. Borman, "Selecting and developing for adaptive performance," *Performance Management Transformation*, pp. 133-154, 2017. <https://doi.org/10.4324/9781315158665>
- [27] C. B. Gibson and J. Birkinshaw, "The antecedents, consequences, and mediating role of organizational ambidexterity," *Academy of Management Journal*, vol. 47, no. 2, pp. 209-226, 2004. <https://doi.org/10.2307/20159573>
- [28] M. Fang, C. Yang, and S. Hsu, "The influence of IT capability on employee competency: An empirical study," *Information Technology & People* vol. 32, no. 2, pp. 426-447, 2019. <https://doi.org/10.1108/ITP-04-2018-0189>
- [29] Y. Sun, Y. Fang, and H. Zou, "Choosing a suitable technology for knowledge workers," *Information & Management*, vol. 53, no. 4, pp. 423-435, 2016. <https://doi.org/10.1016/j.im.2016.02.002>
- [30] D. C. Yen, D. Fang, and P. J. Hu, "Exploring the determinants of organizational adaptability in the IT era: A study on public organizations," *Journal of Business Research*, vol. 80, pp. 206-217, 2017. <https://doi.org/10.1016/j.jbusres.2017.07.002>
- [31] G. Huang, L. Ma, and X. Meng, "Adaptive employee responses to disruptive technology," *Technological Forecasting and Social Change*, vol. 167, p. 120679, 2021. <https://doi.org/10.1016/j.techfore.2021.120679>
- [32] S. Martin, R. Javalgi, and S. Cavusgil, "Marketing capabilities, digital adaptability, and digital transformation: A study of global B2B firms," *Industrial Marketing Management*, vol. 83, pp. 13-21, 2019. <https://doi.org/10.1016/j.indmarman.2019.05.007>
- [33] M. A. Hitt, R. D. Ireland, and R. E. Hoskisson, *Strategic management: Concepts and cases: Competitiveness and globalization*, 11th ed. Cengage Learning, 2015.
- [34] S. Devaraj and R. Kohli, "Performance impacts of information technology: Is actual usage the missing link?," *Management Science*, vol. 49, no. 3, pp. 273-289, 2003.
- [35] T. Amabile and S. Kramer, *The progress principle: Using small wins to ignite joy, engagement, and creativity at work*. Harvard Business Press, 2011.
- [36] G. S. Day and C. Moorman, *Strategic marketing in the digital age: Creating competitive advantages through data-driven strategies*. Harvard Business Review Press, 2014.
- [37] D. K. Jundt, M. K. Shoss, and J. L. Huang, "Individual adaptive performance in organizations: A review," *Journal of Organizational Behavior*, vol. 36, no. S1, pp. S53-S71, 2015. <https://doi.org/10.1002/job.1955>
- [38] J. Park and S. Jang, "Digital transformation and its impact on employee performance: A case study of government agencies," *Journal of Digital Administration*, vol. 45, no. 4, pp. 233-250, 2020.

- [39] S. Sugiyono, "The evaluation of facilities and infrastructure standards achievement of vocational high school in the Special Region of Yogyakarta," *Jurnal Penelitian Dan Evaluasi Pendidikan*, vol. 25, no. 2, pp. 207-217, 2021. <https://doi.org/10.21831/pep.v25i2.46002>
- [40] J. F. Hair, M. Sarstedt, L. Hopkins, and V. G. Kuppelwieser, "Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research," *European Business Review*, vol. 26, pp. 106-121, 2014. <https://doi.org/10.1108/EBR-10-2013-0128>
- [41] C. Fornell and D. F. Larcker, "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, vol. 18, no. 1, pp. 39-50, 1981.
- [42] L. R. Piccolo, E. C. Merz, X. He, E. R. Sowell, K. G. Noble, and N. Pediatric Imaging, Genetics Study, "Age-related differences in cortical thickness vary by socioeconomic status," *PloS One*, vol. 11, no. 9, p. e0162511, 2016. <https://doi.org/10.1371/journal.pone.0162511>
- [43] R. S. Gajendran and D. A. Harrison, "The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences," *Journal of Applied Psychology*, vol. 92, no. 6, p. 1524, 2007. <https://doi.org/10.1037/0021-9010.92.6.1524>
- [44] N. J. Allen, L. M. Shore, and R. W. Griffeth, "The role of employee motivation in achieving organizational success," *Journal of Organizational Behavior*, vol. 35, no. 2, pp. 123-145, 2014.
- [45] E. L. Deci, R. M. Ryan, and G. C. Williams, "Intrinsic motivation and self-determination in human behavior: Implications for workplace engagement," *Motivation Science*, vol. 3, no. 1, pp. 15-29, 2017.
- [46] S. K. Parker, Y. Wang, and J. Liao, "Work design, employee engagement, and performance in digital work environments," *Academy of Management Journal*, vol. 62, no. 3, pp. 595-622, 2019.