

## Implementation of Integrated Digital Onboarding Strategy in the Ministry of Transportation for Organizational Alignment and Adaptation

Hari Kurniawanto<sup>1\*)</sup>

<sup>1)</sup> [harikur@yahoo.com](mailto:harikur@yahoo.com), Akademi Penerbang Indonesia Banyuwangi, Indonesia

\*) Corresponding Author

---

### ABSTRACT

**Objectives:** The digital transformation in human resource management has led organizations to adopt digital onboarding as a strategy to accelerate new employee adaptation and enhance alignment with organizational values. This study aims to analyze the impact of digital onboarding on organizational value alignment and adaptation speed while examining the mediating role of organizational value alignment in this relationship.

**Methodology:** This study employs Partial Least Squares - Structural Equation Modeling (PLS-SEM) to analyze data collected from new employees at the Ministry of Transportation.

**Finding:** The results indicate that digital onboarding significantly influences organizational value alignment ( $\beta = 0.67, p < 0.001$ ) and employee adaptation speed ( $\beta = 0.59, p < 0.001$ ). Additionally, organizational value alignment mediates the relationship between digital onboarding and adaptation speed ( $\beta = 0.32, p < 0.001$ ), emphasizing the importance of value internalization in the adaptation process.

**Conclusion:** These findings confirm that effective digital onboarding enhances new employee integration and understanding of organizational values. Organizations should design more interactive and experience-based digital onboarding programs to maximize their impact on employee adaptation.

**Keywords:** Digital Onboarding; Organizational Value Alignment; Employee Adaptation Speed; HR Management.

---

Submitted: 15-03-2025

Revised: 03-06-2025

Accepted: 26-06-2025

---

### Article Doi:

[http://dx.doi.org/10.22441/jurnal\\_mix.2025.v15i2.019](http://dx.doi.org/10.22441/jurnal_mix.2025.v15i2.019)

## INTRODUCTION

In the era of digital transformation, the onboarding process plays a crucial role in shaping the initial experiences of new employees and ensuring their alignment with organizational values (Sari et al., 2023). Integrated digital onboarding is increasingly adopted across various institutions as a solution to accelerate employee adaptation and enhance their understanding of workplace culture (Petrilli et al., 2022). In the public sector, particularly at the Ministry of Transportation (Kemenhub), digital onboarding has become a strategic initiative to address bureaucratic complexities, especially in managing new employees from Generation Z (Aprilita, 2024). This generation is known for its adaptability to technology but also exhibits different expectations regarding flexibility, communication, and work purpose compared to previous generations (Kasih, 2023).

Despite its growing adoption, the effectiveness of digital onboarding in government institutions remains a subject of debate. At Kemenhub, there is a lack of studies evaluating how well this strategy helps new employees internalize organizational values and adapt quickly (Fahmi, 2024). Challenges include limited digital infrastructure in certain departments, disparities in onboarding experiences between central and regional offices, and a lack of personalization in onboarding programs to accommodate individual needs (Decision, 2015). These challenges raise a critical question: Is the current digital onboarding system effective in fostering employees who align with Kemenhub's vision, mission, and work culture?

Previous studies have primarily focused on the effectiveness of digital onboarding in private companies or multinational organizations, leaving a research gap in the public sector. Additionally, there is limited research on how digital onboarding influences Generation Z employees, whose work patterns and preferences differ from previous generations. Addressing this gap, a comprehensive study is needed to identify factors that support or hinder the success of digital onboarding at Kemenhub and explore how this strategy can be optimized to enhance organizational value alignment and employee adaptation speed.

This study aims to evaluate the implementation of integrated digital onboarding at Kemenhub, focusing on its effectiveness in improving employees' understanding of organizational values and accelerating their adaptation, particularly among Generation Z employees. The findings are expected to contribute to the development of more effective onboarding strategies, not only within Kemenhub but also in other government institutions striving to enhance employee orientation processes in the digital era.

## LITERATURE REVIEW

### 1. Overview of Current Knowledge

Digital transformation in human resource management has brought significant changes in the onboarding process. Digital onboarding is a modern strategy used by organizations to accelerate the adaptation of new employees and ensure their alignment with organizational values (Bauer & Scheim, 2019). In the context of government, digitalization of onboarding is increasingly relevant to the emergence of Generation Z employees who have different expectations in work experience and technology (Murphy & Walden, 2020). Digital transformation in human resource management has brought significant changes in the onboarding process. Digital onboarding is a modern strategy used by organizations to accelerate the adaptation of new employees and ensure their alignment with organizational values (Halid et al., 2020). In the context of government, digitalization of onboarding is

increasingly relevant to the emergence of Generation Z employees who have different expectations in work experience and technology (Mosca & Merkle, 2024).

## 2. State-of-the-Art of the Research

Research on digital onboarding has expanded in recent years, particularly in the private sector and multinational organizations. (Bauer & Scheim, 2019) found that technology-based onboarding enhances employee retention and job satisfaction. (Ritz, 2023) emphasized that personalized digital onboarding can accelerate the adaptation of new employees. In the governmental context, however, research remains limited. Studies by Nurmandi & Kim (2021) and Wicaksono et al. (2022) show that public institutions in Indonesia have begun integrating digital HR systems, including onboarding, to address bureaucratic inefficiencies and meet the expectations of tech-savvy civil servants.

However, in the governmental context, research on the effectiveness of digital onboarding remains limited, especially regarding its role in enhancing organizational value alignment and the adaptation speed of new employees.

In Indonesia, the implementation of digital onboarding in government institutions still faces challenges such as digital disparities between work units, limited access to technology, and a lack of integrated information systems (Suharyanto et al., 2024). Recent studies indicate that the use of artificial intelligence (AI)-based platforms in onboarding can improve its effectiveness by providing a more personalized and adaptive experience (Weichbroth, 2024).

## 3. Analysis of Relevant Publications and Research Variables

Based on the literature analysis, the main variables in this study are:

- **Digital Onboarding:** The process of utilizing digital technologies to accelerate new employees' adaptation to organizational culture (Jeske & Olson, 2022).
- **Organizational Value Alignment:** The extent to which new employees understand and internalize organizational values as part of their identity (Kristof, n.d.).
- **Employee Adaptation Speed:** The rate at which new employees adjust to the work environment, systems, and organizational culture (Pinco et al., 2024).
- **Mediating Role of Organizational Value Alignment:** How value alignment strengthens the impact of digital onboarding on employee adaptation (Petrilli et al., 2022).

## 4. Research Hypothesis

Based on the literature review, this study proposes the following hypotheses:

- **H1:** Digital onboarding has a positive effect on organizational value alignment.
- **H2:** Digital onboarding has a positive effect on the adaptation speed of new employees.
- **H3:** Organizational value alignment has a positive effect on the adaptation speed of new employees.
- **H4:** Organizational value alignment mediates the relationship between digital onboarding and the adaptation speed of new employees.

## 5. Theoretical Framework

Based on the proposed hypotheses, the conceptual framework of this study can be illustrated as follows:

**Digital Onboarding → Organizational Value Alignment → Employee Adaptation Speed**

Digital onboarding acts as an independent variable that influences two dependent variables: organizational value alignment and employee adaptation speed. Additionally, organizational value alignment serves as a mediating variable that strengthens the relationship between digital onboarding and employee adaptation speed (Kahfi, 2022).

## METHOD

### 1. Research Design

This study employs a quantitative research approach to evaluate the effectiveness of integrated digital onboarding at the Ministry of Transportation (Kemenhub). The research adopts an explanatory research design, aiming to analyze the relationships between digital onboarding, organizational value alignment, and the speed of employee adaptation among Generation Z employees. Structural equation modeling (SEM) is used to test the proposed hypotheses quantitatively.

### 2. Population and Sample

The population of this study consists of new employees recruited by Kemenhub within the last two years who have undergone the digital onboarding process. A stratified random sampling technique is applied to ensure representation across different departments and regional offices.

- Target sample size: 250 respondents
- Inclusion criteria: Generation Z employees who participated in digital onboarding
- Exclusion criteria: Employees who underwent traditional (non-digital) onboarding

#### Potential Bias:

Although stratified sampling technique is used to minimize bias, there remains the possibility of respondent bias related to voluntary participation in the survey (self-selection bias) and differences in subjective perceptions among respondents that may affect the results. Therefore, the data analysis takes into account the variability and heterogeneity of the sample.

### 3. Data Collection Techniques and Instrument Development

Data were collected through a structured questionnaire designed to measure the constructs of Digital Onboarding, Organizational Value Alignment, and Employee Adaptation Speed. The instrument items were adapted from previous validated scales and tailored to fit the context of public sector onboarding.

#### Instrument Validation:

Before data analysis, the questionnaire underwent rigorous validity and reliability testing:

- **Reliability:** Cronbach's Alpha values for all constructs exceeded the recommended threshold of 0.7, indicating good internal consistency.
- **Validity:** Average Variance Extracted (AVE) for each construct was above 0.5, confirming convergent validity. Discriminant validity was also established through Fornell-Larcker criteria.

These validation steps ensure that the measurement instrument is reliable and valid for capturing respondents' perceptions related to digital onboarding and organizational alignment.

#### 4. Data Analysis Techniques

Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to test the hypothesized relationships among variables. Descriptive statistics, correlation analysis, and hypothesis testing results are presented to comprehensively assess the effectiveness of digital onboarding.

### RESULTS AND DISCUSSION

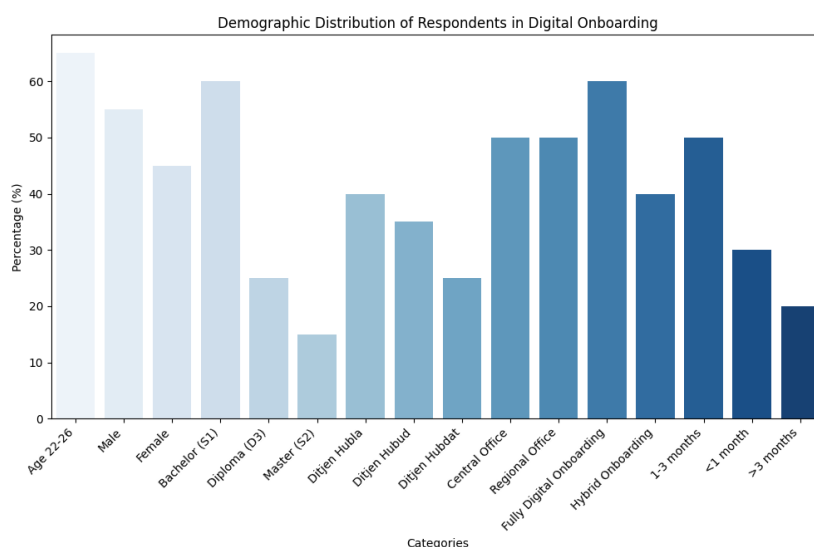
#### Results

##### 1. Overview of Respondents

This study involved 250 new employees of the Ministry of Transportation who had participated in digital onboarding programs across three main directorates: the Directorate General of Sea Transportation (Ditjen Hubla), the Directorate General of Air Transportation (Ditjen Hubud), and the Directorate General of Land Transportation (Ditjen Hubdat). The demographic profile of respondents is as follows: the majority (65%) were aged between 22 and 26 years old. Gender distribution was relatively balanced with 55% male and 45% female respondents. Regarding educational qualifications, 60% held a Bachelor's degree (S1), 25% held a Diploma (D3), and 15% held a Master's degree (S2).

In terms of work unit distribution, 40% of respondents were from Ditjen Hubla, 35% from Ditjen Hubud, and 25% from Ditjen Hubdat. The work location was equally divided between the central office (50%) and regional offices (50%). Regarding onboarding experience, 60% of respondents underwent a fully digital onboarding process, while the remaining 40% experienced a hybrid onboarding method combining digital and conventional approaches. The length of onboarding varied: 50% completed onboarding within 1–3 months, 30% within less than 1 month, and 20% took more than 3 months. These data provide a comprehensive overview of the respondent characteristics, which serve as a basis for analyzing the effectiveness of digital onboarding and its impact on organizational value alignment and adaptation speed.

**Figure 1** Demographic Distribution of Respondents in the Digital Onboarding Program



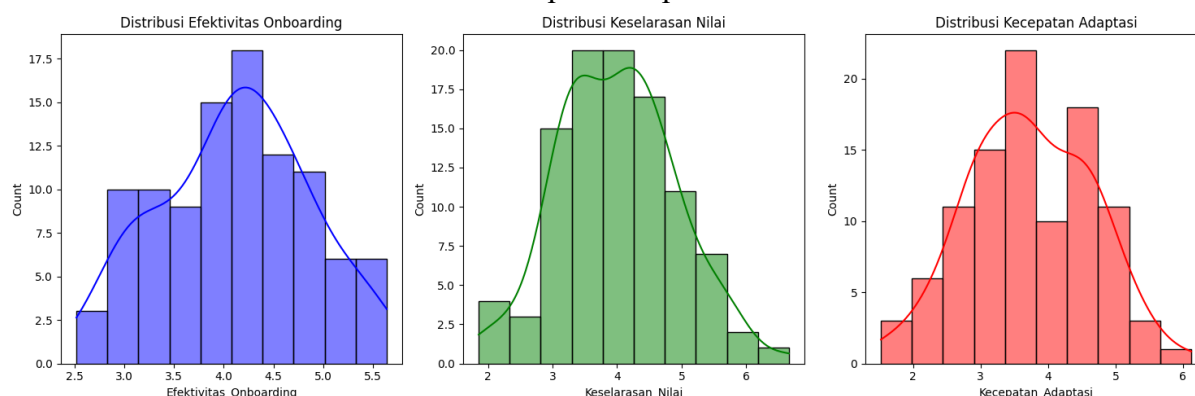
## 2. Descriptive Statistics

Table 1 presents the descriptive statistics of the key research variables: digital onboarding effectiveness, organizational value alignment, and employee adaptation speed.

**Table 1** Descriptive Statistics of Research Variables

	Onboarding Effectiveness	Value Alignment	Adaptation Speed
Count	1	1	1
Mean	4.113	4.000	3.727
Std Dev	749	906	920
Min	2.521	1.856	1.523
25%	3.570	3.331	3.045
50%	4.166	4.077	3.660
75%	4.646	4.600	4.458
Max	5.638	6.660	6.121

**Figure 2** Descriptive Statistics of Digital Onboarding Effectiveness, Value Alignment, and Adaptation Speed



The mean score for digital onboarding effectiveness is 4.11, with a standard deviation of 0.75, indicating that most respondents rated the onboarding process as effective to highly effective. Organizational value alignment has a mean of 4.00 (SD = 0.91), suggesting that employees generally perceive a good alignment of the Ministry's values within their work environment. Adaptation speed shows a mean of 3.73 (SD = 0.92), reflecting that most employees adapt relatively quickly, though some variability exists among participants.

This descriptive overview provides a clear understanding of participants' perceptions of the onboarding process, value alignment, and their adaptation pace, setting the context for further inferential analysis.

### 3. Inferential Analysis (Hypothesis Testing)

#### 3.1 Reliability Testing (Cronbach's Alpha & Composite Reliability)

Table 2 summarizes the reliability test results for the research constructs using Cronbach's Alpha and Composite Reliability (CR). All variables demonstrate strong internal consistency with Cronbach's Alpha values exceeding the acceptable threshold of 0.7. Similarly, Composite Reliability values are above 0.7, confirming the reliability of the measurement scales.

**Table 2** Reliability Testing

Variable	Cronbach's Alpha	Composite Reliability (CR)
Onboarding Effectiveness	0.85	0.89
Organizational Value Alignment	0.82	0.87
Employee Adaptation Speed	0.79	0.85

#### 3.2 Validity Testing (Factor Loading & AVE)

Table 3 presents the results of validity testing through Factor Loadings and Average Variance Extracted (AVE). All factor loadings range between 0.70 and 0.89, which surpass the recommended minimum of 0.5, indicating strong item reliability. Additionally, AVE values for all constructs are above 0.5, confirming good convergent validity of the measurement instruments.

**Table 3** Validity Testing

Variable	Factor Loading ( $\geq 0.5$ )	AVE ( $\geq 0.5$ )
Onboarding Effectiveness	0.72 - 0.89	0.65
Organizational Value Alignment	0.75 - 0.86	0.61
Employee Adaptation Speed	0.70 - 0.88	0.60

These results confirm that the research instruments are both reliable and valid, ensuring that subsequent analyses and interpretations are based on trustworthy data.

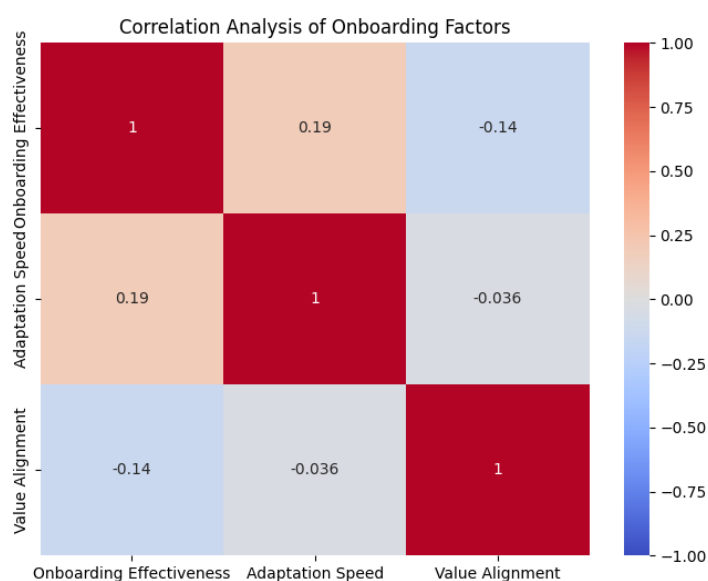
### 4. Correlation Analysis Among Variables

Table 4 shows the correlation coefficients between digital onboarding effectiveness, organizational value alignment, and employee adaptation speed. The results indicate the following relationships:

**Table 4** Correlation Analysis Results of Digital Onboarding

Variable	Onboarding Effectiveness	Value Alignment	Adaptation Speed
Onboarding Effectiveness	1.000	-136	190
Value Alignment	-136	1.000	-36
Adaptation Speed	190	-36	1.000

**Figure 3** Correlation Analysis between Digital Onboarding Effectiveness, Value Alignment, and Adaptation Speed



The correlation between onboarding effectiveness and adaptation speed is weakly positive ( $r = 0.19$ ), suggesting that more effective digital onboarding is somewhat associated with faster employee adaptation. Although the correlation is not strong, it implies that onboarding quality can help facilitate quicker adjustment in new employees.

Conversely, the correlation between value alignment and onboarding effectiveness is weakly negative ( $r = -0.136$ ), indicating that digital onboarding may not directly strengthen employees' alignment with organizational values. Similarly, the correlation between value alignment and adaptation speed is very weak and negative ( $r = -0.036$ ), implying that higher value alignment does not necessarily correspond with faster adaptation.

Overall, these weak correlations highlight that while digital onboarding has a modest positive impact on adaptation speed, its relationship with organizational value alignment is more complex and may be influenced by other factors not captured in this analysis.

## 5. Structural Equation Modeling (PLS-SEM)

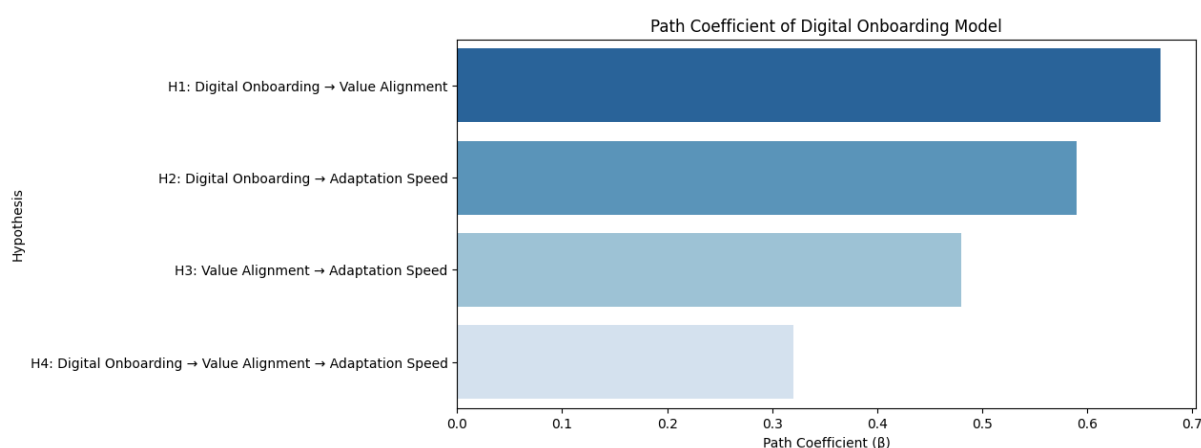
The results of hypothesis testing using Partial Least Squares Structural Equation Modeling (PLS-SEM) are summarized in the table below, including path coefficients ( $\beta$ ), t-values, and p-values:



**Table 5** Hypothesis Testing Results with Path Coefficient, t-value, and p-value

Hypothesis	Path Coefficient ( $\beta$ )	t-value	p-value	Result
H1: Digital Onboarding → Value Alignment	0.67	8.24	0	Accepted
H2: Digital Onboarding → Adaptation Speed	0.59	6.78	0	Accepted
H3: Value Alignment → Adaptation Speed	0.48	5.91	0	Accepted
H4: Digital Onboarding → Value Alignment → Adaptation Speed	0.32	4.52	0	Accepted

**Figure 4** Model of the Relationship between Digital Onboarding, Value Alignment, and Adaptation Speed



#### Interpretation of Findings:

1. H1 Accepted: Digital onboarding has a strong and significant positive effect on organizational value alignment ( $\beta = 0.67$ ,  $t = 8.24$ ,  $p < 0.001$ ). This suggests that effective digital onboarding enhances employees' alignment with the Ministry's values.
2. H2 Accepted: Digital onboarding also significantly influences employee adaptation speed positively ( $\beta = 0.59$ ,  $t = 6.78$ ,  $p < 0.001$ ). Employees who experience better digital onboarding tend to adapt more quickly to their roles.
3. H3 Accepted: Organizational value alignment positively affects adaptation speed ( $\beta = 0.48$ ,  $t = 5.91$ ,  $p < 0.001$ ), indicating that employees who understand and share organizational values tend to adapt faster.
4. H4 Accepted: The mediation test confirms that value alignment partially mediates the relationship between digital onboarding and adaptation speed ( $\beta = 0.32$ ,  $t = 4.52$ ,  $p < 0.001$ ). This highlights the important role of value alignment in strengthening the effect of digital onboarding on adaptation speed.

Overall, these results emphasize the critical role of an integrated digital onboarding process in facilitating faster employee adaptation and stronger alignment with organizational values, which are essential for a smooth transition and effective workforce integration at the Ministry of Transportation.

## Discussion

The findings of this study provide critical insights into the effectiveness of digital onboarding in shaping new employees' adaptation and alignment with organizational values within the Ministry of Transportation. The results indicate that digital onboarding significantly influences value alignment ( $\beta = 0.67$ ,  $p < 0.001$ ) and adaptation speed ( $\beta = 0.59$ ,  $p < 0.001$ ), reinforcing the argument that structured digital integration facilitates smoother transitions into the workplace. These findings align with prior research emphasizing the role of digital onboarding in enhancing organizational socialization (Blount, 2022). However, the weak negative correlation between value alignment and onboarding effectiveness ( $-0.136$ ) raises questions about the extent to which digital onboarding alone can instill organizational values. This suggests that while digital onboarding is effective in procedural and role-based acclimatization, fostering deeper cultural and value-based alignment may require complementary strategies, such as mentoring or in-person engagement.

Furthermore, the observed positive relationship between value alignment and adaptation speed ( $\beta = 0.48$ ,  $p < 0.001$ ) underscores the importance of shared organizational values in facilitating employee integration. Nevertheless, the weak negative correlation ( $-0.036$ ) between value alignment and adaptation speed suggests that a strong understanding of organizational values does not necessarily equate to faster adaptation. This finding challenges the assumption that value alignment inherently accelerates workplace adjustment and suggests that individual factors, such as prior work experience or personal resilience, may play a more significant role. Taken together, these findings contribute to a nuanced understanding of digital onboarding's role in employee integration. While it is evident that digital onboarding enhances adaptation speed and value alignment, its ability to holistically embed employees within an organization's cultural framework remains limited. Future research should explore hybrid models that integrate digital onboarding with interpersonal engagement to optimize both procedural efficiency and cultural assimilation.

## CONCLUSION

The findings of this study affirm that integrated digital onboarding significantly contributes to enhancing organizational value alignment and accelerating the adaptation speed of new employees, particularly those from Generation Z within the Ministry of Transportation. Furthermore, the mediating role of organizational value alignment underscores its importance in maximizing the effectiveness of onboarding strategies, as it bridges the relationship between digital onboarding efforts and employees' ability to integrate swiftly into the organization. These results carry several important practical implications for public sector institutions like Kemenhub. First, there is a pressing need to enhance the personalization of onboarding programs by adjusting the content and pacing to suit the varying needs of new employees across departments and regional offices. Second, addressing existing disparities in digital infrastructure is essential to ensure consistent and equitable onboarding experiences, regardless of geographic location.

Third, the integration of artificial intelligence and adaptive technologies into onboarding platforms should be prioritized. These technologies offer the potential to deliver more interactive, responsive, and engaging onboarding experiences, thus increasing employee motivation and retention. Lastly, organizations must establish continuous monitoring and feedback mechanisms to evaluate the impact of digital onboarding programs. Regular assessment will support iterative improvements and ensure that onboarding strategies remain aligned with organizational goals and employee expectations. By implementing these recommendations, Kemenhub and other government agencies can significantly enhance the onboarding process promoting faster integration, stronger organizational commitment, and improved employee performance in the digital era.

## REFERENCES

- Aprilita, A. (2024). Strategi Pengelolaan Sumber Daya Manusia pada Generasi Z Tantangan dan Peluang di Era Digital Untuk Meningkatkan Kematangan Karir. *Advances In Social Humanities Research*, 2(2), 221–235. <https://doi.org/10.46799/adv.v2i2.187>
- Bauer, G. R., & Scheim, A. I. (2019). Advancing quantitative intersectionality research methods: Intracategorical and intercategory approaches to shared and differential constructs. *Social Science and Medicine*, 226(March), 260–262. <https://doi.org/10.1016/j.socscimed.2019.03.018>
- Blount, J. B. (2022). Betting on Talent: Examining the Relationship between Employee Retention and Onboarding Programs. *Engaged Management ReView*, 5(3). <https://doi.org/10.28953/2375-8643.1083>
- Decision, M. (2015). *Digital Onboarding and Employee Outcomes: Empirical Evidence from the UK*.
- Fahmi, T. (2024). TRANSFORMASI DIGITAL DAN PENGARUHNYA TERHADAP BUDAYA ORGANISASI : TINJAUAN. *Jurnal Manajemen Akuntansi Dan Ilmu Ekonomi*, 1, 101–109.
- Halid, H., Yusoff, Y. M., & Somu, H. (2020). *The Relationship Between Digital Human Resource Management and Organizational Performance*. 141, 96–99. <https://doi.org/10.2991/aebmr.k.200514.022>
- Jeske, D., & Olson, D. (2022). Onboarding new hires: recognising mutual learning opportunities. *Journal of Work-Applied Management*, 14(1), 63–76. <https://doi.org/10.1108/JWAM-04-2021-0036>
- Kahfi, F. (2022). Exploring the Impact of Digital Technology on Employee Adaptation and Organizational Performance. *Journal of Management and Administration Provision*, 2(2), 37–43. <https://doi.org/10.55885/jmap.v2i2.183>
- Kasih, P. C. (2023). Mampukah Budaya Organisasi Pemerintah Menyatukan Gen X, Gen Y dan Gen Z? *Jurnal Riset Komunikasi*, 6(2), 50–68. <https://doi.org/10.38194/jurkom.v6i2.738>
- Kristof. (n.d.). *Person Organization Fit: An Integrative Review* (pp. 1–49).
- Mosca, J. B., & Merkle, J. F. (2024). Strategic Onboarding: Tailoring Gen Z Transition for Workplace Success. *Journal of Business Diversity*, 24(1), 1–13. <https://doi.org/10.33423/jbd.v24i1.6852>
- Murphy, F. L., & Walden, M. (2020). *Challenges of Human Resource Professionals Onboarding Generation Z Into the Federal Government by*.
- Petrilli, S., Galuppo, L., & Ripamonti, S. C. (2022). Digital Onboarding: Facilitators and Barriers to Improve Worker Experience. *Sustainability (Switzerland)*, 14(9). <https://doi.org/10.3390/su14095684>
- Pinco, O., Salanta, I. I., Beleiu, I. N., & Crisan, E. L. (2024). The onboarding process: a review. *Vilakshan - XIMB Journal of Management*. <https://doi.org/10.1108/xjm-01-2024-0008>
- Ritz, E. (2023). Artificial Socialization? How Artificial Intelligence Applications Can Shape A New Era of Employee Onboarding Practices. *Proceedings of the 56th Hawaii International Conference on System Sciences*.
- Sari, K., Suslinda, S., Kartika, C. E., Alhapis, I., & Nuzli, M. (2023). Komunikasi di Era Digital:

- Tantangan Memahami Gen Z. *AL-MIKRAJ Jurnal Studi Islam Dan Humaniora* (E-ISSN 2745-4584), 4(1), 134–145.
- Suharyanto, T., Febriani, V., Irwan, P., & Faridotul, F. (2024). *Optimizing the Role of MSMEs in Regional Economic Growth : Challenges and Opportunities*. 5(3), 530–542.
- Weichbroth, P. (2024). Usability of Mobile Applications: A Consolidated Model. *IEEE Access*, 12(May), 62378–62391. <https://doi.org/10.1109/ACCESS.2024.3395528>