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The influence of digital leadership and psychological empowerment on sustainable employability through work engagement in Generation Z employees in Bali

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ABSTRACT

This research aims to analyze the influence of *digital leadership* and *psychological empowerment* on *sustainable employability* with *work engagement* as a mediating variable in Generation Z employees in Bali Province. This inquiry adopts a quantitative methodology utilizing a survey framework involving 150 participants, curated through purposive sampling protocols. Primary data was harvested via a Likert-scale instrument and processed through Partial Least Squares Structural Equation Modeling (PLS-SEM) via the SmartPLS 4 platform. The empirical evidence indicates that *digital leadership* exerts a constructive or statistically significant influence on *work engagement*, whereas *psychological empowerment* yields a significant yet inverse impact on *work engagement*. Furthermore, *digital leadership* lacks a direct significant correlation with *sustainable employability*, while *psychological empowerment* maintains a significant negative relationship. Conversely, *work engagement* demonstrates a robust positive or significant effect on *sustainable employability*. The finding of the mediation analysis demonstrate that *work engagement* mediates the full relationship between *digital leadership* and *sustainable employability*. Meanwhile, *work engagement* partially mediates the relationship between *psychological empowerment* and *sustainable employability* in a negative direction. These findings suggest that work engagement has an important role on improving the sustainability of work capacity, while the influence of leadership and psychological empowerment shows more complex dynamics in the Generation Z workforce.

Keywords: digital leadership; psychological empowerment; work engagement; sustainable employability; Generation Z

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1. INTRODUCTION

Changes in the work environment in the digital era have brought significant transformations in human resource management. Digitalization is not only related to the use of technology, but also affects communication patterns, coordination, decision-making, and organizational leadership strategies. Organizations are required to adapt quickly because almost all work activities are now integrated with digital technology. In this framework, the stewardship of leaders is paramount in steering personnel toward successfully navigating these transitions. Consequently, *digital leadership* constitutes an essential competency within contemporary enterprises, as it possesses the capacity to synthesize technological evolution into robust operational strategies (Stana et al., 2018).

Digital leadership also orchestrates the augmentation of *sustainable employability*, representing the individual proficiency to sustain optimal output, wellness, and contextual resilience throughout a prolonged tenure (Deng et al., 2021). Digital leadership helps employees develop relevant skills and improve readiness for job changes (Abbu et al., 2022). However, these dynamics exhibit variability, as they are contingent upon the moderating influence of organizational culture, digital literacy levels, and individual readiness to face change.

But changes in the structure of the workforce show that Generation Z is starting to dominate the world of work. This generation has characteristics that are close to technology and tend to want work that is meaningful, flexible, and provides a space for participation (Zhu et al., 2022). This poses a challenge for organizations in maintaining work attachment (*Work Engagement*) employees. *Work engagement* constitutes a constructive psychological state defined by *vigor*, *dedication*, and *absorption*, which functions as a critical determinant in advancing personnel productivity and organizational agility (Ringle et al., 2022; Schaufeli et al., 2002).

Beyond leadership, intrinsic variables such as *psychological empowerment* significantly contribute to fostering *work engagement*. This construct encapsulates the state wherein individuals perceive their labor as meaningful, possessing competence, autonomy, and organizational influence. Such conditions catalyze intrinsic motivation, which ultimately bolsters *work engagement* (Khan et al., 2025).

Theoretically, the relationship between *Digital Leadership*, *Psychological empowerment*, *Work Engagement*, and *Sustainable employability* can be explained through *Job Demands–Resources Theory (JD-R Theory)*. This theory states that *Job Resources* or *Personal Resources* play a role on encouraging work engagement and sustainability of employees' work capacity (Bakker et al., 2023). In this study, *Digital Leadership* positioned as *Job Resources*, while *Psychological empowerment* As *Personal Resources* which together form *Work Engagement* and impact on *Sustainable employability*.

Previous studies generally indicate that digital leadership has a positive effect on work engagement and sustainable employability (Li et al., 2026; Purnomo, 2024). Likewise, psychological empowerment has been found to enhance employees' motivation, engagement, and long-term employability (Khan et al., 2025; Rahi et al., 2021). However, the findings are not entirely consistent. Several studies suggest that the effectiveness of digital leadership depends on employees' readiness for change, digital literacy, and organizational culture, which may weaken or even limit its positive impact. These mixed findings indicate that the relationship between digital leadership, psychological empowerment, work engagement, and sustainable employability remains inconclusive and requires further investigation.

In addition, limited studies have examined these variables simultaneously within a single integrated model, particularly among Generation Z employees. This context is important because Generation Z has unique characteristics, including strong familiarity with digital technology, expectations for meaningful work, and a preference for participative work environments. Furthermore, Bali provides a distinctive research setting due to its service- and tourism-oriented economy, where employees are expected to continuously adapt to technological changes while maintaining high levels of engagement and long-term employability. Therefore, examining these relationships among Generation Z employees in Bali contributes to addressing the existing research gap and provides practical insights for organizations managing a digitally oriented workforce.

Based on the identified research gap, this study aims to examine the effects of digital leadership and psychological empowerment on work engagement and sustainable employability among Generation Z employees in Bali. In addition, this study investigates the mediating role of work engagement in explaining how organizational and psychological resources contribute to sustainable employability. The findings are expected to enrich the Job Demands–Resources (JD-R) literature and provide practical recommendations for organizations seeking to develop a sustainable and digitally adaptive workforce.

2. METHOD

2.1. Research Location

This research was carried out in the Province of Bali which was chosen because it has a strategic position as a center for tourism, creative economy, and digital transformation in Indonesia. The high level of technology adoption and the dominance of the productive age workforce, especially Generation Z, make Bali as a pertinent setting facilitates an exploration into the nexus between *digital leadership*, *work engagement*, *psychological empowerment*, *work ability*, and *innovative work behavior*. This condition on supported by data from the Central Statistics Agency and regional employment reports that show an increase in the participation of young workers based on digital technology.

2.2. Population and Sample

The population in this research is all Generation Z workers in Bali Province, namely individuals aged 18–27 years who are still actively working and utilizing digital technology in work activities. According to Creswell (2022), population is the entire unit of analysis that is the basis for generalizing research results.

The research sample were curated via purposive sampling protocols, involving the strategic identification of subjects based on specific benchmarks aligned with the overarching investigative goals. The sample criteria include: (1) Generation Z employees aged 18–27 years, (2) working in Bali Province, and (3) actively using digital technology at work. The minimum number of samples is set at 150 respondents, referring to the provision of 10 times the number of research indicators (Hair et al., 2022).

2.3. Data Type

This study uses a quantitative approach with numerical data obtained through a five-point Likert scale questionnaire. This approach allows testing of relationships between variables statistically and inferently (Hair et al., 2022). The data collected encapsulated participants' evaluations regarding *digital leadership*, *work engagement*, *psychological empowerment*, *sustainable employability*, and *innovative performance*, subsequently evaluated via Partial Least Squares Structural Equation Modeling (PLS-SEM) method (Ringle et al., 2022).

2.4. Data Source

The data sources both primary or secondary data sources. Primary information was harvested directly from participants via a closed-ended Likert-scale instrument to quantify the perceptions of research constructs. Conversely, secondary data was curated from diverse scholarly literature, including indexed journals, academic monographs, formal reports, and statistical datasets, to bolster the theoretical framework and facilitate the interpretation of findings (Hair et al., 2022).

2.5. Data Collection Techniques

Data collection was executed via survey methodology utilizing a closed-ended instrument distributed through hybrid online-offline channels to targeted subjects. The research inventory was synthesized from validated theoretical constructs, employing a five-point Likert scale to numerically capture participant evaluations. This approach was prioritized for its procedural efficiency in accessing a broad demographic, aligning with the stringent requirements of PLS-SEM-based path analysis (Creswell & Guetterman, 2023).

2.6. Research Instruments

The research instrument on the form of a five-point Likert scale closed questionnaire was used to measure research variables in a systematic and structured manner. This measurement apparatus is deemed methodologically efficient for evaluating participant attitudes and perceptions, offering a precise level of discriminatory sensitivity while minimizing respondent cognitive fatigue. The research instrument consisted of previously validated measurement scales adapted from established studies on digital leadership, psychological empowerment, work engagement, and sustainable employability. Details regarding the source of measurement, dimensions, number of items, and example questionnaire statements are presented in Table 1. All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

2.6.1. Measurement of Constructs

All constructs in this study were measured using previously validated scales adapted from established studies. Respondents evaluated each item using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree (See Table 1).

Table 1. Measurement of Constructs and Indicators

Variable	Source	Dimensions / Indicators
Digital Leadership	Stana et al (2018)	Digital vision, innovation support, technology utilization, communication
Psychological Empowerment	Khan et al (2025)	Meaning, competence, self-determination, impact
Sustainable Employability	Deng et al. (2021).	Work ability, adaptability, long-term productivity

The questionnaire items were adapted to the context of Generation Z employees in Bali while maintaining the conceptual meaning of the original scales. Prior to data collection, the instrument was reviewed by experts and pilot-tested to ensure clarity, content validity, and contextual suitability.

2.7. Data Analysis Techniques

Data analysis was executed through Partial Least Squares Structural Equation Modeling (PLS-SEM), facilitated by the SmartPLS 4 software suite. This methodology was prioritized for its robustness in processing multifaceted structural models within a parsimonious sample size or its resilience to non-normal data distributions (Hair et al., 2022). The evaluation on the measurement model (outer model) involved rigorous assessment on convergent validity, utilizing a loading factor threshold of ≥ 0.7 and $AVE \geq 0.5$, discriminant was verified through cross-loading analysis, while internal consistency was substantiated via Cronbach's Alpha or Composite Reliability, with both metrics meeting the ≥ 0.7 benchmark (Ghozali, 2021). Meanwhile, the structural model (inner model) evaluation assessed predictive power and relevance through R-Square and Q-Square values, and hypothesis testing using a t-statistical value of > 1.97 and a p-value of < 0.05 as indicators of significance.

3. RESULT AND DISCUSSION

3.1. Respondent Characteristics

This research was carried out in Bali Province by involving 150 respondents who are Generation Z employees from various job sectors, such as hospitality, restaurants/culinary, retail/sales, education, and health. Data collection was executed through the dissemination of digital inventories via the Google Form platform, targeting a specific cohort that fulfilled the inclusion criteria, namely being in the age range of Generation Z and having work experience. Respondents came from various districts/cities in Bali, so the

data obtained was able to represent the condition of the Generation Z workforce in various regions and industrial sectors.

Table 2. Respondent Characteristics

Characteristics	Categories	N	%
Gender	Male	81	54.0
	Women	69	46.0
Age	18–20 years old	11	7.3
	21–23 years old	43	28.7
	24–25 years	64	42.7
	26–27 years old	32	21.3
Long Time Working	< 1 year	11	7.3
	1–2 years	51	34.0
	3–4 years	28	18.7
	> 4 years	60	40.0
Field of Work	Hospitality	41	27.3
	Restaurant/Culinary	36	24.0
	Retail/Sales	30	20.0
	Education	24	16.0
	Health	19	12.7
Domicile	São Paulo	25	16.7
	Badung Regency	34	22.7
	Gianyar Regency	22	14.7
	Klungkung Regency	19	12.7
	Tabanan Regency	16	10.7
	Buleleng Regency	13	8.7
	Jembrana Regency	10	6.7
	Bangli Regency	8	5.3
	Karangasem Regency	3	2.0

Source: Researcher-processed data (2026)

Referring on [Table 2](#), the majority of respondents were male (54.0%), with the predominance of age in the range of 24–25 years (42.7%) which shows that respondents are in the productive phase of Generation Z. In terms of work experience, most vast majority of participants demonstrate professional tenure exceeding 4 years (40.0%), which indicates a fairly good level of job stability.

Judging from the employment sector, the hospitality sector is the most dominant (27.3%), followed by restaurants/culinary (24.0%) and retail/sales (20.0%), which reflects Bali's economic structure based on the service sector. Meanwhile, in terms of domicile, the most respondents came from Badung Regency (22.7%), which is the center of economic and tourism activities.

Overall, the characteristics of the respondents show that Generation Z studied is a productive age group with adequate work experience and actively involved in the service sector and digital economy, so it is relevant to examine the variables of *digital leadership*, *psychological empowerment*, *work engagement*, and *sustainable employability*.

3.2. Convergent Validity Test

Convergent validity was assessed by evaluating loading factor coefficients and the Average Variance Extracted (AVE). Indicators are deemed valid at values > 0.70, while constructs are validated if the AVE exceeds > 0.50.

Table 3. Outer Loading Results

Variable	Indicator	Loading Factor	Rule of Thumb	Conclusion
Work Engagement (M)	M.1	0.872	0.700	Valid
	M.2	0.931	0.700	Valid
	M.3	0.936	0.700	Valid
Digital Leadership (X1)	X1.1	0.845	0.700	Valid
	X1.2	0.839	0.700	Valid
	X1.3	0.824	0.700	Valid
	X1.4	0.827	0.700	Valid
Psychological Empowerment (X2)	X2.1	0.939	0.700	Valid
	X2.2	0.927	0.700	Valid
	X2.3	0.919	0.700	Valid
	X2.4	0.939	0.700	Valid
Sustainable Employability (Y)	Y1.1	0.911	0.700	Valid
	Y1.2	0.924	0.700	Valid
	Y1.3	0.927	0.700	Valid
	Y1.4	0.910	0.700	Valid

Source: Researcher-processed data (2026)

Referring on Table 3, all measurement indicators exhibit outer loading coefficients exceeding the 0.70 threshold; consequently, they satisfy the established criteria for convergent validity. The indicators with the highest contribution are M.3 (0.936), X2.1 (0.939), and Y1.3 (0.927), which show a strong ability to represent their respective constructs.

Table 4. Average Variance Extracted (AVE) Results

Variable	AVE
Digital Leadership (X1)	0.695
Psychological Empowerment (X2)	0.867
Sustainable Employability (Y)	0.843
Work Engagement (M)	0.835

Source: Researcher-processed data (2026)

Referring on Table 4, all variables have an AVE value above 0.50, thus meeting the criteria for convergent validity. The *Psychological Empowerment* variable had the highest AVE value (0.867), which indicates the greatest ability to explain the variance of the indicators. Thus, it declares that all constructs in this study are acceptable and need some further investigation in their structural models.

3.3. Discriminant Validity Test

The researchers conducted the discriminant validity test to demonstrate that each latent construct in their research shows distinct characteristics which separate it from all other constructs. The study used the *Heterotrait-Monotrait Ratio* (HTMT) method to conduct its testing. Imam Ghozali (2021) states that a construct achieves discriminant validity when its HTMT value reaches 0.90 because this shows that all latent variables maintain distinct identities without excessive overlap.

Table 5. Heterotrait-Monotrait Ratio (HTMT) Results

Variable	<i>Digital Leadership (X1)</i>	<i>Psychological Empowerment (X2)</i>	<i>Work Engagement (M)</i>	<i>Sustainable Employability (Y)</i>
Digital Leadership (X1)	-	0.684	0.731	0.698
Psychological Empowerment (X2)	0.684	-	0.782	0.765
Work Engagement (M)	0.731	0.782	-	0.814

<i>Sustainable Employability (Y)</i>	0.698	0.765	0.814	-
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Source: Researcher-processed data (2026)

Referring on Table 5, all HTMT ratios remain beneath 0.90, confirming that the structural constructs successfully satisfy the prerequisites for discriminant validity. The highest HTMT value was found in the relationship between *Work Engagement (M)* and *Sustainable Employability (Y)* of 0.814, but still below the required limit. This shows that each variable in the model has adequate and empirically distinguishable construct differences.

3.4. Composite Reliability and Cronbach's Alpha Test

The testing process for construct reliability assessed how well the indicator functioned as a measurement tool for latent variable assessment. PLS-SEM analysis provides a measurement of reliability through its determination of Cronbach's Alpha and Composite Reliability values. Ghozali (2021) states that a construct becomes reliable when its value exceeds 0.70.

Table 6. Construct Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability	Rule of Thumb	Conclusion
<i>Digital Leadership (X1)</i>	0.854	0.901	0.700	Reliable
<i>Psychological Empowerment (X2)</i>	0.949	0.963	0.700	Reliable
<i>Sustainable Employability (Y)</i>	0.938	0.955	0.700	Reliable
<i>Work Engagement (M)</i>	0.901	0.938	0.700	Reliable

Source: Researcher-processed data (2026)

Referring on Table 6, all variables surpass 0.70 for Cronbach's Alpha and Composite Reliability, demonstrating robust internal consistency and reliability. The *Psychological Empowerment (X2)* variable has the highest reliability value, which indicates a very strong internal consistency of the indicator. Hence, all constructs in the study have been stated to be reliable and feasible for further analysis.

3.5. R-Square

The evaluation on the structural model begins by looking at the R-Square value as a measure of the model's predictive ability. According to Ghozali (2021), the value of 0.75 is categorized as strong, 0.50 moderate, or 0.25 weak.

Table 7. R-Square Test Results

Variable	R-Square	R-Square Adjusted
<i>Work Engagement (M)</i>	0.475	0.468
<i>Sustainable Employability (Y)</i>	0.484	0.473

Source: Researcher-processed data (2026)

Referring on Table 7, the R-Square value in Work Engagement is 0.475 and Sustainable Employability is 0.484, both of which are in the moderate category. This shows that exogenous variables are able to explain about 47–48% of the variation of endogenous variables in the model.

Furthermore, the calculation of error (Pe) is carried out with the following formula:

$$Pe_i = \sqrt{1 - R_i^2}$$

The calculation results showed a Pe value of 0.724 for Work Engagement and 0.718 for Sustainable Employability. The value is then used to calculate the total determination coefficient of the model as follows:

$$R_m^2 = 1 - (Pe_1^2 \times Pe_2^2)$$

The calculation results showed an R²m value of 0.729, which indicates that our model is able to explain 72.9% of the variation in the endogenous variables. This value belongs to the moderate to strong category, so the model has good explanatory ability.

3.6. Q-Square

The model's goodness of fit assessment requires R-Square analysis together with Q-Square predictive relevance assessment. Q-Square predictive relevance test results show how well the model predicts outcomes for endogenous variables in the model. A Q-Square value of > 0 indicates that the model has good predictive relevance.

Table 8. Q-Square Test Results

Variable	Q ² Predict
<i>Work Engagement (M)</i>	0.462
<i>Sustainable Employability (Y)</i>	0.339

Source: Researcher-processed data (2026)

Referring on Table 8, the entire value of Q² is above zero, so the model has good predictive relevance. The Q² value in *Work Engagement* is higher, indicating stronger predictability than *Sustainable Employability*.

3.7. Direct Effect Test Results

Table 9. Direct Effect Test Results

Relationships Between Variables	Original Sample (O)	Sample Mean (M)	STDEV	T-Statistic	P-Value
<i>Digital Leadership</i> → <i>Sustainable Employability</i>	-0,008	-0,007	0,075	0,106	0,916
<i>Digital Leadership</i> → <i>Work Engagement</i>	0,509	0,512	0,063	8,094	0,000
<i>Psychological Empowerment</i> → <i>Sustainable Employability</i>	-0,299	-0,298	0,077	3,873	0,000
<i>Psychological Empowerment</i> → <i>Work Engagement</i>	-0,260	-0,257	0,070	3,698	0,000
<i>Work Engagement</i> → <i>Sustainable Employability</i>	0,492	0,491	0,074	6,681	0,000

Source: Researcher-processed data (2026)

Empirical findings in Table 9 reveal that *Digital Leadership* exerts a constructive and substantial influence on *Work Engagement*, thereby validating the first hypothesis. Conversely, *Psychological Empowerment* demonstrates a significant yet adverse impact on *Work Engagement*, leading to the rejection of the second hypothesis. Furthermore, *Digital Leadership* lacks a statistically meaningful effect on *Sustainable Employability*, resulting in the third hypothesis being dismissed. Paradoxically, *Psychological Empowerment* maintains a significant but negative correlation with *Sustainable Employability*, prompting the rejection of the fourth hypothesis. Finally, *Work Engagement* is shown to have a positive and statistically significant effect on *Sustainable Employability*, confirming the acceptance of the fifth hypothesis. Overall, these results suggest that work engagement has an important role as a factor that improves the sustainability of employability, while the direct influence of other variables suggests more complex dynamics in the context of the Generation Z workforce.

3.8. Indirect Effect Test Results

Indirect effect testing was conducted to test the role of *Work Engagement* as a mediating variable between *Digital Leadership* and *Psychological Empowerment* on *Sustainable Employability* using the bootstrapping method. According to Imam Ghozali (2021), the influence of mediation is stated to be significant if the t-statistic > 1.96 and the p-value < 0.05.

Table 10. Indirect Effect Test Results

Relationships Between Variables	Original Sample (O)	Sample Mean (M)	STDEV	T-Statistic	P-Value
<i>Digital Leadership</i> → <i>Work Engagement</i> → <i>Sustainable Employability</i>	0,250	0,251	0,047	5,319	0,000
<i>Psychological Empowerment</i> → <i>Work Engagement</i> → <i>Sustainable Employability</i>	-0,128	-0,127	0,041	3,109	0,002

Source: Researcher-processed data (2026)

Referring on Table 10, the two indirect relationships showed significant results because the t-statistical value was > 1.96 and the p-value was < 0.05. *Digital Leadership* has a positive or significant effect on *Sustainable Employability* through *Work Engagement* ($\beta = 0.250$; $t = 5.319$). This shows that *Work Engagement* fully mediates the relationship. Furthermore, *Psychological Empowerment* has a significant but negative effect on *Sustainable Employability* through *Work Engagement* ($\beta = -0.128$; $t = 3.109$). These results show that partial *mediation* occurs, even though the direction of the relationship is not as expected.

3.9. Discussion

3.9.1. The Influence of Digital Leadership on Work Engagement

The empirical outcomes demonstrate that *Digital Leadership* exerts a constructive and substantial influence on *Work Engagement* among Generation Z personnel in Bali Province. This signifies that leadership proficiency in harnessing digital tools, championing transformation, and cultivating adaptive communication pathways effectively augments employee engagement levels. Specifically, *Digital Leadership* fosters a flexible, focused, and responsive organizational climate, thereby catalyzing the mobilization of cognitive energy, professional dedication, and proactive participation in operational duties. These findings are congruent with the scholarly precedents of Purnomo (2024), Li et al. (2026), and Khan et al. (2025) which maintain that *Digital Leadership* optimizes *Work Engagement* through robust technical support and streamlined communication frameworks. In perspective *Job Demands–Resources Model*, *Digital Leadership* Acting as a *Job Resources* that can increase the intrinsic motivation of employees (Bakker & Demerouti, 2007). The inherent technological proficiency and adaptive capacity of the Generation Z cohort further reinforce this nexus, positioning *Digital Leadership* as a pivotal determinant for elevating *Work Engagement* within contemporary organizational ecosystems.

3.9.2. The Influence of Psychological Empowerment on Work Engagement

The finding of the research demonstrate that *Psychological empowerment* has a significant effect on *Work Engagement*, but with the direction of negative relationships with Generation Z employees in Bali Province. This suggests that granting autonomy, responsibility, and freedom in work does not necessarily increase work engagement, especially when individuals do not have adequate psychological readiness. Under certain conditions, a high level of empowerment can actually give rise to work pressure, uncertainty, and the burden of responsibility that have an impact on the decline *Commitment*. These findings differ from studies Rahi et al. (2021) finds a positive influence, *Psychological empowerment* can have a negative impact in conditions of high working pressure. Within the *Job Demands–Resources (JD-R) Model*, *Psychological Empowerment* is categorized as a *Personal Resource*; however, its capacity to foster positive motivation is not absolute, particularly when workplace pressures surpass individual thresholds (Bakker & Demerouti, 2007). Consequently, *Psychological Empowerment* must be synthesized with institutional support mechanisms to achieve an optimal elevation of *Work Engagement*.

3.9.3. The Influence of Digital Leadership on Sustainable Employability

The finding of the research show that *Digital Leadership* has no significant effect on *Sustainable employability* to Generation Z employees in Bali Province. This indicates that the ability of leaders to manage digital technology and support work transformation has not been directly able to increase the sustainability of employee work capacity. *Sustainable employability* It is not only influenced by leadership, but also by other

factors such as individual readiness, work experience, working conditions, and personal adaptability in dealing with work dynamics. These findings differ from studies [Abbu et al. \(2022\)](#), which shows that the influence *Digital Leadership* against *Employability* It is not always direct. In perspective *Job Demands–Resources Model*, *Digital Leadership* constitute *Job Resources* that tend to work through psychological mechanisms such as enhancement *Work Engagement* Before producing *Outcome* Long term (Bakker & Demerouti, 2007). Thus, *Digital Leadership* indirectly bolsters *Sustainable Employability* solely through the intervention of specific mediating constructs.

3.9.4. The Effect of Psychological Empowerment on Sustainable Employability

The finding of the research demonstrate that *Psychological empowerment* has a significant effect on *Sustainable employability*, but with a negative direction for Generation Z employees in Bali Province. This demonstrate that psychological empowerment does not always improve the sustainability of work capacity, especially when individuals do not yet have the readiness to face high work demands. Autonomy and great responsibility under certain conditions can actually cause psychological pressure that has an impact in the long-term decline of work ability. These findings are not in line with research [Rahi et al. \(2021\)](#) emphasizes that *Psychological empowerment* can have a negative impact if it is not supported by adequate working conditions. In the framework *Job Demands–Resources Model*, *Psychological empowerment* Includes *Personal Resources* that doesn't always produce *Outcome* positive when work demands are more dominant (Bakker & Demerouti, 2007). Therefore, psychological empowerment needs to be balanced with organizational support or individual readiness in order to improve *Sustainable employability* optimally.

3.9.5. The Effect of Work Engagement on Sustainable Employability

The finding of the research demonstrate that *Work Engagement* have a positive or significant effect on *Sustainable employability* to Generation Z employees in Bali Province. This indicates that elevated *Work Engagement* effectively augments an individual's capacity to maintain professional longevity. High commitment reflects a positive psychological state defined by vigor, dedication, and absorption which facilitates consistent performance and structural readiness to navigate organizational transformations. These findings are congruent with the scholarly precedents of [Rahi et al. \(2021\)](#) substantiate that *Work Engagement* serves as a pivotal determinant in augmenting the sustainability of professional capacity. From the perspective of the *Job Demands–Resources (JD-R) Model*, *Work Engagement* play a role as part of the *Motivational Process* that connects work resources with *Outcome* Positive (Bakker & Demerouti, 2007). Thus, work involvement is the main mechanism that encourages *Sustainable employability* in the context of modern work.

3.9.6. The Role of Work Engagement in Mediating the Influence of Digital Leadership on Sustainable Employability

The finding of the research demonstrate that *Work Engagement* able to mediate influence *Digital Leadership* against *Sustainable employability* to Generation Z employees in Bali Province. This suggests that *Digital Leadership* does not inherently bolster *Sustainable Employability*; rather, it functions by first cultivating *Work Engagement* as a critical intermediary mechanism. While *Digital Leadership* architects an adaptive and supportive organizational climate, it is the resulting elevation in engagement that ultimately drives longitudinal work capacity. These conclusions are congruent with existing scholarly literature [Purnomo \(2024\)](#), [Li et al. \(2026\)](#), and [Khan et al. \(2025\)](#) who show that *Digital Leadership* Improve *Outcome* work through improvement *Commitment*. In the framework *Job Demands–Resources Model*, *Digital Leadership* As *Job Resources* working through *Motivational Process* in the form of *Work Engagement* Before producing *Outcome* Long term (Bakker & Demerouti, 2007). Thus, *Work Engagement* acting as the main mediator (*Full Mediation*) which explains the relationship between *Digital Leadership* and *Sustainable employability*.

3.9.7. The Role of Work Engagement in Mediating the Influence of Psychological Empowerment on Sustainable Employability

The finding of the research demonstrate that *Work Engagement* able on mediate influence *Psychological empowerment* against *Sustainable employability* to Generation Z employees in Bali Province, but with a negative relationship direction. This indicates that psychological empowerment does not always increase the sustainability of work capacity, because under certain conditions it can actually reduce work involvement which then has an impact on *Sustainable employability*. Although conceptually *Psychological empowerment* reflect positive conditions such as work meaning, autonomy, and confidence, *Empowerment* without adequate support can give rise to psychological distress that affects *Commitment* employees. These findings are not in line with [Rahi et al. \(2021\)](#), which shows that *Empowerment* can have a negative impact in conditions of high work demands. In perspective *Job Demands–Resources Model*, *Psychological empowerment* As *Personal Resources* can turn into pressure if it is not balanced with the individual's ability to manage work demands, while *Work Engagement* Acting as a *Motivational Process* that bridges the relationship (Bakker & Demerouti, 2007). Thus, *Work Engagement* acting as a partial mediator (*Partial Mediation*), so that organizations need to manage psychological empowerment proportionately and supported by an adequate work environment in order on be able to improve *Sustainable employability* optimally.

4. CONCLUSION

Referring on the finding of research on Generation Z employees in Bali Province, it can be concluded that *digital leadership* has a positive effect on *work engagement*, which shows that the ability of leaders to utilize digital technology and build adaptive work communication is able to increase employee work engagement. But, *psychological empowerment* has a significant but negative effect on *work engagement*, which indicates that the provision of autonomy and high responsibility does not always have a positive impact if it is not balanced with the psychological readiness of the individual. These findings imply that *Work Engagement* is not merely a byproduct of empowerment, but is also contingent upon an individual's adaptive readiness to navigate occupational demands.

The results of the study show that *digital leadership* does not have a direct effect on *sustainable employability*, while *psychological empowerment* actually has a significant effect with a negative direction on *sustainable employability*. This indicates that the sustainability of employees' work capacity is not only determined by leadership and empowerment, but also by other factors such as individual readiness, work experience, and work environment conditions. Conversely, *Work Engagement* has been empirically established as a constructive determinant of *Sustainable Employability*, so it can be understood that work involvement is the main factor that encourages the ability of individuals to maintain work capacity in a sustainable manner.

Beyond direct correlations, this investigation substantiates the mediating function of *Work Engagement* in bridging the relationship between the analyzed constructs. *Digital leadership* affects *sustainable employability* through *work engagement* with a full mediation pattern, which shows that digital leadership needs to first increase work engagement before making a long-term impact. Meanwhile, *psychological empowerment* is also mediated by *work engagement*, but with a negative and partial relationship direction. This shows that psychological empowerment that is not managed properly can reduce work involvement and have an impact on reducing *sustainable employability*.

Referring on these findings, organizations are encouraged to bolster *Digital Leadership* beyond mere technological proficiency, emphasizing the capacity to engineer adaptive communication pathways, provide work support, and create an environment that encourages employee engagement. The provision of *psychological empowerment* needs to be done gradually and accompanied by clear directions so as not to cause work pressure. Generation Z employees also need to increase their readiness to adapt, maintain work motivation, and utilize empowerment as an opportunity for self-development. Furthermore, future researchers are encouraged to incorporate additional latent variables and broaden the empirical scope to achieve a more holistic understanding of *Sustainable Employability* within contemporary organizational landscapes.

Ethical Approval

This research was conducted in strict adherence to the ethical tenets governing social science investigations involving human participants. Formal institutional review board (IRB) approval was not mandated, as the methodology utilized anonymized survey instruments and excluded clinical interventions, and has a minimal level of risk to respondents. Nevertheless, the entire research process still pays attention to the principles of voluntary participation, data confidentiality, and responsible use of information for academic purposes.

Informed Consent Statement

All respondents have obtained an explanation of the purpose on the research before filling out the questionnaire. Informed consent was obtained voluntarily prior to data acquisition; respondents were guaranteed strict confidentiality, with all data utilized exclusively for scholarly investigation and academic research purposes.

Authors' Contributions

N.P.S.D.P. - conceptualization, methodology, formal analysis, provision of data sources, writing of initial drafts; N.S.S. - methodology, validation, manuscript review and editing; C.A.M. - manuscript review and editing.

Disclosure Statement

The author stated that there was no conflict of interest in this study, whether financial, personal, or professional.

Data Availability Statement

The data used in this research is available upon request to the author of the correspondence by considering the confidentiality aspect of the respondents.

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