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The influence of digital leadership on innovative performance through work engagement in Generation Z employees in Bali

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ABSTRACT

This study investigates the impact of digital leadership on innovative performance through the mediating role of work engagement among Generation Z employees in Bali. This study adopts a quantitative approach using a survey design, with data collected from 100 respondents selected through purposive sampling. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used for the analysis. The findings reveal that work engagement positively and significantly impacts innovative performance, while digital leadership boosts work engagement in a statistically meaningful way; however, it fails to directly influence innovative performance to a significant degree. Moreover, the full mediation by work engagement in the link between digital leadership and innovative performance suggests that employee engagement channels the innovation-boosting effects of digital leadership. These findings imply that digital leadership indirectly improves innovative performance by first enhancing employees' work engagement. Therefore, organizations are encouraged to strengthen digital leadership practices while simultaneously fostering higher levels of engagement among employees, particularly Generation Z workers, to support innovation in a digitally oriented work environment.

Keywords: digital leadership; work engagement; innovative performance; Generation Z; PLS-SEM

1. INTRODUCTION

Digital transformation fundamentally alters business operations and strategies, particularly in how organizations manage business processes, internal communication systems, and decision-making mechanisms in the modern workplace. These changes require organizations to adopt technology and develop managerial capabilities to integrate technology into their overall organizational strategy (Stana et al., 2024). The integration of digital technology shifts work structures from hierarchical to more collaborative and flexible patterns, demanding high adaptability from all organizational members (Stana et al., 2024). Organizations that successfully implement digital transformation tend to demonstrate faster responsiveness to market changes and customer needs. Therefore, digital transformation is not merely a technical shift but also a managerial transformation that requires relevant leadership in digital contexts.

However, despite the rapid adoption of digital technologies, many organizations still face a fundamental problem in maintaining employee work engagement, indicating a gap between technological advancement and human resource involvement in the workplace. Gallup (2024) reports that global employee engagement declined from 23% to 21% in 2024, resulting in significant economic losses. This condition shows that digitalization improves efficiency but does not automatically enhance employees' psychological involvement. This highlights that the core problem is not digital technology itself, but how leadership manages employee engagement in digital work environments.

Changes in the digital work environment are further complicated by the dominance of Generation Z in the workforce, a cohort born between 1997 and 2012, who grew up in fully digital environments. This generation is highly adaptive to technology, prefers flexible work systems, and demands fast communication, transparency, and meaningful work experiences. These characteristics require organizations to redesign their leadership approaches to align with the expectations of younger employees. However, Generation Z shows relatively lower work engagement than other generations. The WorkL Global Workforce Report indicates a decline in engagement from 71% in 2021 to 67% in 2023. This group also exhibits high turnover intention, as they tend to leave organizations when their psychological needs are not fulfilled. Thus, the main issue is not only generational differences but also the inability of existing leadership approaches to sustain engagement among digital-native employees.

In this context, innovative performance is a critical indicator of organizational success in a knowledge-based economy. Innovative performance refers to employees' ability to generate, develop, and implement new ideas in their work (Wang et al., 2025). It is closely linked to organizational competitiveness, as employees with high innovative performance tend to contribute more proactively to value creation. Therefore, innovative performance is an essential outcome of digital human resource management research.

Digital leadership has emerged as a strategic factor in managing organizations in the digital era. This refers to leaders' ability to utilize digital tools and platforms to enhance communication, decision-making, and organizational transformation (Stana et al., 2024). Digital leaders integrate technology into their organizational vision and strategy to ensure adaptive and responsive operations. Previous studies have suggested that digital leadership supports innovation by fostering adaptability and accelerating information flow.

Work engagement, defined as a positive psychological state characterized by vigor, dedication, and absorption, is a key mechanism linking leadership to performance outcomes. Engaged employees demonstrate higher energy levels, stronger emotional attachment, and greater willingness to contribute to organizational goals than their disengaged counterparts. Research indicates that work engagement enhances both productivity and innovative behavior. In Generation Z, engagement is strongly influenced by leadership quality and workplace flexibility. Therefore, in this study, work engagement is positioned as a mediating mechanism that explains how leadership influences innovative performance.

Although prior studies have examined digital leadership, work engagement, and innovative performance, the findings remain inconsistent, particularly regarding the direct effect of digital leadership on innovative performance. This inconsistency suggests the need for a mediating mechanism to clarify this relationship.

In the Indonesian context, workforce digitalization continues to increase, with Internet penetration among productive-age workers exceeding 78% in 2024 (Badan Pusat Statistik Provinsi Bali, 2025). Bali Province represents a relevant context because of its high digital adoption in the tourism, service, and creative economy sectors, which are dominated by Generation Z workers (Badan Pusat Statistik Provinsi Bali, 2025). The combination of a digitally intensive work environment and a young workforce makes Bali an ideal setting for examining leadership–engagement–innovation relationships.

However, organizations in this context face persistent challenges related to low engagement and high turnover intention among Generation Z. Deloitte (2025) reports that nearly half of Generation Z employees intend to leave their jobs within two years if expectations are not met. This condition negatively affects innovative performance, as disengaged employees tend to focus only on routine tasks rather than on creative contributions (Wang et al., 2025). This strengthens the urgency of understanding how digital leadership can improve engagement and ultimately enhance innovative performance in this specific workforce.

This study addresses inconsistent findings in the literature regarding the direct relationship between digital leadership and innovative performance. This study extends existing research by focusing on Generation Z employees in Bali, a digitally native workforce segment that remains underexplored in organizational studies. Grounded in the Job Demands–Resources (JD-R) Theory, this study conceptualizes digital leadership as a key job resource that fosters employee work engagement, which enhances innovative performance. By incorporating work engagement as a mediating mechanism, this study offers a more comprehensive explanatory model and contributes to a deeper understanding of how digital leadership drives innovation in contemporary digital work environments.

2. LITERATURE REVIEW

2.1. JD-R Theory

JD-R Theory is used as a theoretical foundation because it is able to explain the relationship between job demands, job resources, psychological conditions, work involvement, and work behavior outcomes. Job demands reflect physical, mental, and emotional demands, whereas job resources are support that helps employees get work done and stay motivated (Bakker et al., 2023). Work resources such as leadership, communication, and technology access play important roles in increasing employee work energy, commitment, and engagement.

In this context, digital leadership is considered a job resource because it provides information support, work direction, and adaptation to technology (Stana et al., 2024). These resources increase work engagement, which is characterized by vigor, dedication, and absorption (Bakker et al., 2023). Furthermore, work engagement encourages innovative performance because employees who are actively involved are more innovative and proactive. This theory is relevant for Generation Z, who need flexible work support, fast communication, and a supportive digital environment.

2.2. Digital Leadership

Leaders demonstrate digital leadership by integrating digital technologies into their organization's strategy, communication, and decision-making processes. Digital leaders not only master technology but are also able to build a vision of transformation and organizational readiness to face change. Digital leadership also includes the ability to build trust, collaboration, and readiness for technology-based change (Abbu et al., 2022).

Digital leadership is also understood as the ability to develop a digital mindset, increase organizational competitiveness, and encourage innovation (AlNuaimi et al., 2022). This leadership includes behaviors and competencies in utilizing technology to improve the effectiveness of individual and teamwork. Thus, digital leadership is the ability of leaders to utilize technology, build a vision of change, and create adaptive work environments.

Digital leadership indicators include attitudes towards digitalization, digital competence, digital behavior, and digital transformation skills. These four indicators illustrate the ability of leaders to respond to technological changes while directing organizations to adapt effectively.

2.3. Work Commitment

Work engagement is a positive psychological state marked by vigor, dedication, and deep absorption in one's job. Engaged employees demonstrate intrinsic motivation, mental resilience, and readiness to perform at their best (Bakker et al., 2023). Work engagement is also closely related to productivity, adaptability, and sustainability of performance in modern organizations. In Generation Z, engagement is influenced by the meaning of work, organizational support, and positive work experiences (Widodo et al., 2025). The main dimensions of work engagement include vigor (energy and mental resilience), dedication (sense of pride and meaning of work), and absorption (full involvement and high focus on work).

2.4. Innovative Performance

Innovative performance refers to the ability of individuals to produce, develop, and implement new ideas that provide added value to the organization (Wang et al., 2025). This concept includes not only creativity but also the implementation of ideas in work. Innovative behavior arises from individual initiative in the face of work challenges and the courage to propose new solutions. Innovative performance is a gradual process that involves the creation, promotion, and realization of ideas in work activities. Innovative performance indicators include the ability to generate new ideas, mobilize efforts to realize ideas, realize ideas at work, and actualize the results of innovations in work practice.

2.5. Research Hypotheses

Digital leadership has been proven to have a positive effect on organizational readiness to face digital transformation and increase collaboration and technological readiness (Abbu et al., 2022). In addition, leaders' digital competencies can increase the effectiveness of teamwork in modern organizations. In relation to innovation, digital leadership affects innovative performance because digital leaders can encourage creativity, open access to information, and create a work environment that supports innovation.

Conversely, employees exhibiting high work engagement are more prone to innovative behavior, as this state fosters greater activity in idea generation and organizational contributions. This is in line with the Job Demands–Resources Theory, which explains that work resources, such as leadership, can increase engagement as a psychological mechanism that drives work performance. Work engagement has also been proven to improve the quality of work performance, especially in the Generation Z workforce, which requires flexible and meaningful work support.

Leaders skilled in digital technologies foster a communicative, flexible, and responsive work environment that boosts employee engagement. This connection reveals how tech-adaptive leadership drives higher task involvement (AlNuaimi et al., 2022. Work engagement plays a role in encouraging innovative performance because high work engagement increases energy, intrinsic motivation, and individual initiative in innovation. In addition, digital leadership can also indirectly affect innovative performance through work engagement as a mediating variable, where engagement becomes a psychological pathway that connects leadership support with innovative behavior (Bakker et al., 2023).
Based on this description, the hypothesis of this study is as follows:

H1: Digital leadership positively and significantly affects work engagement among Bali's Generation Z workers.

H2: Digital leadership has a positive and significant impact on the innovative performance of Bali's Generation Z workers.

H3: Work engagement positively and significantly impacts the innovative performance of Bali's Generation Z workers.

H4: Work engagement mediates the impact of digital leadership on innovative performance among Generation Z workers in Bali.

3. METHODOLOGY

This research was conducted in Bali Province, which was chosen because it has a strategic role as a center for tourism, the creative economy, and trade that is integrated with digital technology. Bali's population is projected to reach 4.46 million by 2025, with a dominance of the productive age, including Generation Z, who are active in the world of work (Badan Pusat Statistik Provinsi Bali, 2025). The rate of technology adoption is also high, with Generation Z labor force participation reaching 64.8% and more than 87% using digital technology in work activities, especially in the hospitality sector, creative industries, and digital commerce. This makes Bali a suitable context for examining the relationship between digital leadership, work engagement, and innovative performance within a digital work environment. The study population consisted of all Generation Z employees aged 18–27 years who worked in various sectors in Bali and regularly used digital technology in their jobs. The sample was selected using a purposive sampling technique, applying specific criteria that aligned with the research objectives (Creswell, 2018; Hair et al., 2019).

The number of samples was determined using the "10-times rule" in Partial Least Squares Structural Equation Modeling (PLS-SEM), which suggests that the minimum sample size should be at least ten times the maximum number of indicators in the model; therefore, a minimum of 100 respondents was considered adequate to ensure stable estimation and reliable results, particularly for mediation analysis in PLS-SEM. The respondents in this study were Generation Z employees aged 18–27 years who were actively working in various sectors, including tourism, services, retail, creative industries, and digital-based businesses in Bali, with a minimum work experience of six months and required involvement in the use of digital technologies in their daily work, such as online communication platforms, digital reporting systems, and organizational information systems. A purposive sampling technique was applied to ensure that only respondents who met the criteria were included. Data were collected through structured questionnaires distributed both online (e.g., Google Forms and social media channels) and offline, directly to selected workplaces. All responses were screened for completeness, consistency and eligibility. Incomplete questionnaires, duplicate responses, and respondents who did not meet the inclusion criteria were excluded to ensure data quality and validity for the PLS-SEM analysis.

Data on research variables such as digital leadership, work engagement, and innovative performance were obtained from respondents' perceptions, captured through questionnaires based on a five-point Likert scale. A quantitative approach analyzes these numbers to test the relationships between variables (Hair et al., 2022). The data source consists of primary data obtained directly from respondents and secondary data derived from scientific literature and official reports to strengthen the theoretical foundation and research context (Guetterman et al., 2021).

Survey methods facilitated data collection through closed-ended questionnaires distributed online and offline. The research instrument was drawn from validated indicators in prior studies and employed a 1–5 Likert scale for measurement consistency and straightforward analysis (Spector, 1997). The survey method was chosen because it is efficient in reaching a large number of respondents and supports a systematic quantitative analysis.

Using SmartPLS 4.0, PLS-SEM was used to handle the data analysis, which is ideal for complex models, even with smaller samples. The evaluation of the model included checks for convergent and discriminant validity, alongside reliability assessments via Cronbach's Alpha and Composite Reliability values (Ghozali, 2021). Furthermore, the structural model was tested for R-squared and Q-square values to determine the model's predictive strength, as well as hypothesis tests using t-statistic values and p-values through bootstrapping.

4. RESULTS AND DISCUSSION

4.1. Characteristics of Respondents

This research was conducted in Bali Province, involving 100 respondents who were Generation Z employees from various sectors, such as hospitality, restaurants/culinary, retail/sales, education, and

health. Data were collected through an online questionnaire using Google Forms from individuals who met the age and work experience criteria. Respondents came from various districts/cities in Bali, so they were able to broadly represent the condition of the young workforce. Based on their characteristics, the majority of respondents were male (54%), in the age range of 24–25 years (41%), had a working period of more than 4 years (38%), worked in the hospitality sector (31%), and were domiciled in Badung Regency (23%) as the center of economic and tourism activities in Bali. This shows that respondents are dominated by young productive workers who are relatively experienced and involved in the rapidly growing service sector, making it relevant to describe the conditions of digital leadership, work engagement, and innovative performance in Generation Z in Bali, Indonesia.

4.2. Results

4.2.1. Evaluation of Measurement Models (Outer Model)

4.2.1.1. Convergent Validity

Table 1. Outer Loading Results

Variable	Indicator	Loading Factor	Rule of Thumb	Conclusion
Work Commitment (M)	M.1	0,879	0,700	Valid
	M.2	0,919	0,700	Valid
	M.3	0,923	0,700	Valid
Digital Leadership (X)	X.1	0,815	0,700	Valid
	X.2	0,850	0,700	Valid
	X.3	0,823	0,700	Valid
	X.4	0,865	0,700	Valid
Innovative Performance (Y)	Y.1	0,915	0,700	Valid
	Y.2	0,910	0,700	Valid
	Y.3	0,882	0,700	Valid

Source: Researcher-processed data (2026)

Based on Table 1, all indicators have a loading factor above 0.70, so that all indicators are declared to meet the criteria of convergent validity. In the Work Engagement (M) variable, the value*Loading Factor*The highest is found in the M.3 indicator of 0.923, which shows that this indicator has the strongest contribution in representing the work engagement construct. In the Digital Leadership (X) variable, the highest value was found in the X.4 indicator of 0.865. Meanwhile, in the Innovative Performance (Y) variable, the Y.1 indicator of 0.915 has the highest value. This shows that all indicators in this study were able to reflect their latent constructs well.

Table 2. Average Variance Extracted (AVE) Test Results

Variable	Average Variance Extracted (AVE)
Digital Leadership (X)	0,703
Innovative Performance (Y)	0,815
Work Commitment (M)	0,823

Source: Researcher-processed data (2026)

Based on Table 2, all research variables have an AVE value above 0.50, so that all constructs are declared to meet the criteria of convergent validity. Work Engagement (M) showed the highest AVE at 0.823, meaning that it best explained the variance of its indicators. Innovative Performance (Y) scored

0.815, and Digital Leadership (X) scored 0.703. Thus, all constructs passed the convergent validity threshold.

4.2.1.2. Discriminant Validity

Table 3. Heterotrait-Monotrait Ratio (HTMT) Results

Variable	Digital Leadership (X)	Innovative Performance (Y)	Work Commitment (M)
Digital Leadership (X)	-		
Innovative Performance (Y)	0,484	-	
Work Commitment (M)	0,735	0,579	-

Source: Researcher-processed data (2026)

Table 3 shows all HTMT values between constructs under 0.90, confirming the discriminant validity of the variables. The peak value of 0.735 links two key constructs, while the lowest value of 0.484 connects the others. This proves that each construct is distinct, with no overlap among the model's latent variables.

4.2.1.3. Composite Reliability and Cronbach's Alpha

Table 4. Construct Reliability and Validity Results

Variable	Cronbach's Alpha	Composite Reliability	AVE	Conclusion
Digital Leadership (X)	0,859	0,904	0,703	Reliable
Innovative Performance (Y)	0,887	0,929	0,815	Reliable
Work Commitment (M)	0,892	0,933	0,823	Reliable

Source: Researcher-processed data (2026)

Based on Table 4, all research variables have a Cronbach's Alpha and Composite Reliability value above 0.70, so the entire construct is declared reliable. The Work Engagement (M) variable has a value*The highest Composite Reliability is 0.933, indicating that the indicators in the construct have the highest internal consistency. The Innovative Performance (Y) variable has a Composite Reliability value* of 0.929, while Digital Leadership (X) has a value of 0.904. Thus, all indicators in this study were considered consistent in measuring their respective latent constructs.

4.2.1.4. Evaluation of Structural Models (*Inner Model)*

In assessing the structural model, the R-squares- of each endogenous latent variable were checked to indicate predictive strength. According to Ghozali (2021), the R^2 thresholds are 0.75 (strong), 0.50 (moderate), and 0.25 (weak), which measure the explained variance in endogenous variables.

Table 5. R-Square Test Results

Variable	R-square	R-square Adjusted
Innovative Performance (Y)	0,290	0,275
Work Commitment (M)	0,417	0,411

Source: Researcher-processed data (2026)

Table 5 shows that Work Engagement (M) is explained by digital leadership at 41.7% ($R^2 = 0.417$), while the rest is influenced by factors outside the model. Innovative Performance (Y) is explained by digital leadership and work engagement at 29.0% ($R^2 = 0.290$), with the remaining variance due to other

unmeasured factors. Overall, the model has modest explanatory power, which is acceptable in social research.

4.2.1.5. F-Square

The value of F-square was used to determine the magnitude of the influence of each exogenous variable on the endogenous variable. The value of*F-Square*0.02 is categorized as small, 0.15 medium, and 0.35 large.

Table 6. F-square result

Variable Relationships	F-Square	Categories
Digital Leadership (X) → Work Engagement (M)	0,716	Large
Digital Leadership (X) → Innovative Performance (Y)	0,020	Small
Work Engagement (M) → Innovative Performance (Y)	0,147	Medium

Source: Researcher-processed data (2026)

Based on Table 6, the influence of Digital Leadership (X) on Work Engagement (M) has a value*f-square of 0.716, so it belongs to the large category. The influence of Digital Leadership (X) on Innovative Performance (Y) has a value of f-square of* 0.020, so it is a small category. Meanwhile, the influence of Work Engagement (M) on Innovative Performance (Y) has an F-square value of 0.147, which is in the medium category. This shows that the most significant influence on the research model is the relationship between digital leadership and work engagement.

In addition to R-squared, the goodness of fit of the model can also be assessed using Q-squared predictive relevance, which indicates the extent to which the model has predictive ability against endogenous variables. A Q-squared value of > 0 indicates that the model has good predictive relevance.

Table 7. Q^2 Predict Results

Indicator	Q^2 Predict	Conclusion
M.1	0,359	Has predictive relevance
M.2	0,263	Has predictive relevance
M.3	0,350	Has predictive relevance
Y.1	0,179	Has predictive relevance
Y.2	0,099	Has predictive relevance
Y.3	0,109	Has predictive relevance

Source: Researcher-processed data (2026)

Based on Table 7, all indicators have a Q^2 predictive value greater than 0; therefore, the research model is declared to have good predictive capabilities. The highest Q^2 predictive value was found in the M.1 indicator of 0.359, indicating that the indicator had the strongest predictive ability in the research model. Meanwhile, the lowest Q^2 predictive value is found in the Y.2 indicator of 0.099, but still shows predictive relevance because the value is still above zero. These results show that the research model can adequately predict the indicators of the variables Work Engagement (M) and Innovative Performance (Y).

4.2.1.6. Hypothesis Testing

Table 8. Direct Effect Test Results

Relationships Between Variables	Original Sample (O)	Sample Mean (M)	STDEV	T-Statistic	P-Value
Digital Leadership → Innovative Performance	0,157	0,157	0,110	1,427	0,154
Digital Leadership → Work Engagement	0,646	0,648	0,058	11,218	0,000
Work Engagement → Innovative Performance	0,424	0,427	0,094	4,523	0,000

Source: Researcher-processed data (2026)

Based on Table 8, the hypothesis test results indicate that digital leadership has a positive and significant effect on work engagement ($\beta = 0.646$, $t = 11.218$, $p < 0.05$); therefore, H1 is accepted, meaning that higher digital leadership leads to greater employee work involvement. In contrast, digital leadership has no significant direct effect on innovative performance ($\beta = 0.157$, $t = 1.427$, $p > 0.05$); therefore, H2 is rejected, implying that it does not directly enhance innovation. However, work engagement positively and significantly affected innovative performance ($\beta = 0.424$, $t = 4.523$, $p < 0.05$), supporting H3, which suggests that higher work involvement boosts employees' innovative ability. Moreover, the indirect effect test shows that work engagement significantly mediates the relationship between digital leadership and innovative performance, satisfying the criteria of $t > 1.96$ and $p < 0.05$ (Ghozali, 2021).

Table 9. Indirect Effect Test Results

Relationships Between Variables	Original Sample (O)	Sample Mean (M)	STDEV	T-Statistic	P-Value
Digital Leadership → Work Engagement → Innovative Performance	0,274	0,279	0,073	3,764	0,000

Source: Researcher-processed data (2026)

Based on Table 9, the results of the fourth hypothesis test (H4) showed that digital leadership had a significant effect on innovative performance through work engagement (coefficient 0.274; t-statistic 3.764; $p < 0.05$), thus H4 was accepted. This means that work engagement can mediate the relationship, where digital leadership first increases employee work engagement, which then has an impact on improving innovative capabilities. The form of mediation that occurs is full mediation because the direct influence of digital leadership on innovative performance is not significant, whereas the indirect influence through work engagement is significant.

4.3. Discussion

The results show that digital leadership has a positive and significant effect on work engagement among Generation Z employees in Bali. This shows that leaders' ability to utilize digital technology, build adaptive communication, and provide work support can increase employees' work energy, dedication, and engagement. In the context of Generation Z in Bali, who are highly accustomed to digital environments and expect responsive, technology-based leadership, digital leadership functions as a relevant job resource that fulfills their expectations of immediacy, autonomy, and digital fluency in the workplace. These findings are in line with previous research from AlNuaimi et al., (2022), which affirms that digital leadership can create a collaborative work environment and increase engagement. From the perspective of the Job Demands–Resources Model, digital leadership serves as a job resource that strengthens intrinsic motivation and work engagement (Bakker et al., 2023).

However, digital leadership did not have a significant effect on innovative performance (coefficient of 0.157; t-statistic 1.427; p-value 0.154), which shows that digital leadership has not been able to directly improve employees' IB. This can be explained by the fact that innovative performance is a complex behavioral outcome that requires not only access to digital support from leaders but also strong internal psychological conditions, such as intrinsic motivation, cognitive involvement, and risk-taking willingness. This indicates that innovative performance is influenced by leadership and other factors, such as intrinsic motivation, work culture, and individual courage. This finding is different from Wang et al. (2025), the influence of digital leadership is not always direct to innovation. In the JD-R Model, this shows that job resources require psychological processes before producing work outcomes.

Furthermore, work engagement has been shown to have a positive and significant effect on innovative performance. Employees with high work engagement tend to be more energetic, focused, and intrinsically motivated to generate new ideas and innovate. For Generation Z employees in Bali, engagement is particularly crucial because this generation prioritizes meaningful work experiences, psychological fulfillment, and autonomy in executing tasks. Engagement increases work contribution and innovative behaviors. In the JD-R Model, work engagement is part of a motivational process that connects work resources with positive outcomes (Bakker et al., 2023).

Furthermore, work engagement has been shown to be able to significantly mediate the influence of digital leadership on innovative performance. This shows that digital leadership does not directly increase innovation but increases work involvement first. These findings are supported by Bakker et al. (2023), who explain that engagement is a psychological mechanism that connects leadership with innovative performance. This finding highlights that the effectiveness of digital leadership is highly dependent on its ability to build psychological attachment and meaningful work experiences for employees. In the JD-R Model, digital leadership as a job resource produces outcomes through a motivational process in the form of work engagement.

Overall, the results of the study show that the form of mediation that occurs is full mediation, where work engagement is the main path that explains the influence of digital leadership on innovative performance. In the context of Bali's Generation Z workforce, strengthening engagement is a critical managerial strategy for translating digital leadership into sustainable innovative performance outcomes. This emphasizes that improving the digital capabilities of leaders is not enough; it must be followed by efforts to create working conditions that can increase employee engagement sustainably so that innovative behaviors can flourish.

5. CONCLUSION AND RECOMMENDATIONS

Research findings indicate that digital leadership positively and significantly boosts work engagement, meaning that stronger leaders' skills in leveraging digital tools and fostering adaptive communication elevate Generation Z employees' job involvement. Consequently, innovation gains do not directly stem from digital leadership. In contrast, *work engagement* has been shown to have a positive and significant effect on *innovative performance*, indicating that work engagement is a major factor in encouraging innovative behavior. In addition, *work engagement* fully mediated the relationship between *digital leadership* and *innovative performance*, such that digital leadership continued to contribute to innovation through increased employee work engagement.

Based on these findings, organizations are advised to strengthen the application of digital technology and improve the quality of *digital leadership* to create a work environment that supports employee engagement. Companies need to encourage *work engagement* through increased work morale, dedication, and active participation of employees in idea development. For Generation Z employees, it's important to continue to improve digital adaptability and work engagement in order to be able to generate innovation. Future studies should consider including additional variables, such as *organizational support*, *creative self-efficacy*, *learning culture*, and *psychological safety*, as well as expand the object and number of research samples to provide a more comprehensive understanding of the factors that affect *innovative performance*.

Ethical Approval

Not Applicable

Informed Consent Statement

Not Applicable

Authors' Contributions

IGAA conceptualized the study, designed the research framework, collected the data, conducted the PLS-SEM analysis, and prepared the original draft of the manuscript. NSS contributed to the development of the theoretical framework, interpretation of the findings, and critical review of the manuscript. CAM supported the analysis, strengthened the discussion of the results, and contributed to manuscript review and editing. All authors contributed to the revision of the manuscript and approved the final version.

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No potential conflict of interest was reported by the author(s).

Data Availability Statement

The data presented in this study are available on request from the corresponding author due to privacy reasons.

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Notes on Contributors

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