

The impact of digital leadership and job satisfaction on Indonesian Generation Z's job performance in the workplace

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Abstract

Purpose: This study aims to analyze how digital leadership and digital transformation influence job performance and how job satisfaction acts as a mediator between the effects of digital leadership and digital transformation on job performance among Generation Z in the digital era in Jakarta Indonesia.

Design/methodology/approach: This research was designed using quantitative methods, with data analysis employing the structural equation model (SEM) using AMOS version 25 because multiple regression analyses and a relatively large sample size were required. Data collection utilized a questionnaire consisting of 44 questions. The sampling method employed was non-probability sampling with a purposive technique, resulting in 389 valid respondents who are online authors on paid writing platforms that have emerged in Indonesia.

Findings: The findings indicate a significant positive influence of digital leadership and digital transformation on job satisfaction, as well as the influence of digital leadership on job performance. However, the influence of digital transformation on job performance does not exist. Digital leadership has a dominant influence on both job satisfaction and job performance. Job satisfaction serves as a partial mediator and provides a partial mediation effect between digital leadership and job performance.

Research limitation/implication: This research focuses exclusively on Generation Z individuals working as freelance authors on online platforms. The study was conducted in Indonesia's specific cultural and socio-economic environment. In this context, organizational culture, leadership expectations, and employee attitudes may differ from those in other regions. These contextual factors can shape how digital leadership, job satisfaction, and work performance are perceived and mutually influential. Therefore, these findings may not be directly generalizable for Gen Z to other countries with different cultural and socioeconomic conditions. Future research may expand on this study by replicating variables in diverse cultural and economic contexts to determine whether there are differences in the observed influences across different environments.

Practical implications: Among the eight dimensions used, the highest score was recorded in the digital leadership area, specifically regarding leaders' supports. This suggests that Generation Z respects managers who demonstrate technical skills and possess broader knowledge than themselves, as well as the capability to lead and manage teams remotely. Conversely, the lowest score was observed in digital transformation, indicating that while Generation Z exhibits high digital literacy, they prefer companies to provide open information about their goals and annual work plans. Gen Z also expects complete devices

to be provided for work rather than relying on personal devices. Therefore, Generation Z favors managers who exhibit both digital and leadership skills but tends to prefer companies that supply technological resources over those that expect employees to use their own devices.

Social Implications: Working in creative industries, especially in digital-based roles, can be an effective solution to address job vacancies arising from the population boom among those of productive age. This approach requires less investment in physical office buildings and more investment in digital and technological platforms that can be utilized for both leisure and income generation.

Originality/value: Previous research has primarily focused on Generation Z's job satisfaction in relation to their job performance. This study introduces digital transformation and digital leadership as novel factors. This study was also conducted to address the gap in previous research, particularly by positioning the role of job satisfaction as a mediating variable focused on Gen Z. It uniquely incorporates these elements as key components in evaluating Generation Z's job satisfaction and performance.

Keywords: Generation Z (GZ), Digital Leadership (DL), Two-Factors Theory (TFT), Virtual Team (VT), Job Satisfaction (JS), Job Performance (JP)

Jel Codes: J24, O1, O15

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1. Introduction

The global population is currently dominated by Generation Z and millennials. According to data from the 2024 Mercer Research Center, Generation Z, born after 1996, constitutes 25% of the global population, while millennials, born between 1981 and 1996, make up 23%. The US Share of Workforce Forecast indicates that by 2031, Generation Z will represent 31% of the workforce, a significant increase from 15% in 2022 (www.mercer.com). In summary, Generation Z accounts for 32% of the world population and 42% of the US population and consists of 260 million individuals in China (2021), as reported by Ali, Li and Qiu (2024).

In Indonesia, the Indonesian Statistics Bureau reports that Generation Z comprises the largest demographic group, with almost 75 million individuals, while millennials account for approximately 70 million of the total population of around 27 million (<https://data.goodstats.id/>). These significant numbers present a challenging situation for human capital management in Indonesia, necessitating strategies to effectively harness their capabilities for positive performance. The challenges posed by this large generational cohort are further complicated by the volatility, uncertainty, complexity, and ambiguity (VUCA) world. As stated by Alin and År (2023) this generation is characterized by unique perspectives and digital fluency. Other studies have found that Generation Z demands a friendly and flexible working environment, internship programs, the adoption of the latest technology for work tools, and various social programs that engage them (Ali et al., 2024).

Interestingly, during the COVID-19 pandemic, Generation Z discovered leisure activities and hobbies such as watching movies, reading, and writing on online platforms. More than 20 (www.gramedia.com) new reading and writing platforms have emerged in Indonesia, primarily based in Singapore and the US. These platforms mainly focus on fiction writing across various genres. Readers pay for access to the texts, and authors earn money based on the number of visitors to their sites. The more readers engage with their writing, the higher their earnings, with minimum payments of around USD 300, which is comparable to local minimum wages in Indonesia.

This online writing activity has become a major income for many Generation Z individuals across Indonesia. They tend to prefer careers without fixed office hours, opting for online writing as their profession. This preference contrasts with that of their parents and older generations, who aspired to full-time employment in traditional office settings, viewing such positions as dream jobs and sources of family pride. In contrast, Generation Z favors hybrid or fully online working environments, collaborating with teams from across Indonesia and other Asian countries.

This study differs from previous research (Jameson, McDonnell, Alwarnaidu Vijayarajan & Forristal, 2024) in its focus on the subject matter. The earlier research examined 85 distributor employees and used innovation performance as the dependent variable. In contrast, this study centers on millennial private-sector employees working in Sudirman, using work engagement as the dependent variable (Aldianto, Anggadwita, Permatasari, Mirzanti & Williamson, 2021). Additionally, the research by Dong, Zhu, Li, Chen, Gao, Hu et al. (2022) focused on 304 teachers from elementary (SD), junior high (SMP), and high schools (SMA), using emotional intelligence as an independent variable. The results indicated that self-efficacy did not directly impact work engagement, contrary to previous studies by Gong, Li, Feng, Wu and Kong (2022) and Hassanzadeh-Mohassel, Hesarzadeh and Bagherpour-Velashani (2024). This discrepancy raises questions about other factors that may influence the relationship between self-efficacy and work engagement, warranting the need for further investigation.

1.1. Research Objectives and Questions

The research objectives aim to achieve several key goals and address specific research questions, aligning with how organizations can effectively manage this unique generation to maximize performance by fulfilling their specific needs in the workplace. In particular, this study aims to analyze whether digital leadership and digital transformation influence job performance directly or whether there needs to be mediation by job satisfaction among Gen Z in Indonesia. The research aims and questions collectively adopt a holistic approach to exploring organizational behavior theories and their practical implications for HRM strategies, particularly in performance management systems, to address the challenges posed by the VUCA. These research objectives and questions collectively adopt a holistic approach to explore organizational behavior theories and their practical implications for HRM strategies, especially in performance management systems, to face the VUCA world and the uniqueness of this generation. Some initial questions include: (a) Why is Generation Z attracted to hybrid or online working environments? (b) What specific tasks are suitable for Generation Z, who prefer to work independently with minimal supervision? (c) How do supervision and peer relationships contribute to achieving targets while ensuring job satisfaction? (d) What motivates them to perform at their performance? (e) What remuneration and benefit structures are most appealing to them?

1.2. Relevance of Research

This paper addresses the need to manage Generation Z in the workplace effectively, ensuring they can perform well and work happily, free from burnout and psychological distress (Chen, Masukujjaman, Al-Mamun, Gao & Makhbul, 2023) and far from the intention of quiet quitting (Xueyun, Al-Mamun, Masukujjaman, Rahman, Gao & Yang, 2023). The critical inquiries will focus on measuring employee job satisfaction through Herzberg's two-factor theory (Lee, Lee, Choi & Kim, 2022). This theory offers a formative measurement model and facilitates the development of a quality work-life scale (Yadav, 2022).

According to Hong, Lee, Lee, Hong, Kang, Lee et al. (2023), Generation Z possesses unique characteristics, such as individualism, while also respecting diversity and individuality rather than blindly obeying senior authorities. Their research, which involved 188 nurses in South Korea, found that leadership, work culture improvement, professional growth, and reducing work fatigue were significant factors that influenced these nurses to remain in an organization.

Research by Mosca and Merkle (2024) highlights Generation Z's access to diverse content across multiple devices, resulting in a reduced attention span for any single subject. Their findings suggest strategies such as utilizing mobile technology in the workplace, favoring virtual meetings over in-person interactions, promoting technology collaboration, and deepening the use of YouTube videos to reinforce business strategies and their practical implementation.

Despite Generation Z's technological proficiency, they have less work experience compared to older generations, and external validation from others serves as a form of self-capability validation. This need for validation can lead to anxiety and depression. (Vieira, Gomes-da-Costa & Santos, 2024) stated that Generation Z is less prepared to face competition and handle complexities, having been raised in more stable economic conditions compared to their elders.

Generation Z not only faces a VUCA world but also the challenges posed by the COVID-19 pandemic, which has led to a new working lifestyle characterized by telework—organizing and performing work using technology. Forced by the pandemic to avoid physical offices, they have adapted to working from home and connecting globally via updated devices. In this context, (Ivasciuc, Epuran, Vuță & Tescașiu, 2022) studied the socio-economic impact of telework, particularly concerning work-life balance, productivity, and health across different generations of Romanian employees.

Telework implementation has also positively impacted job performance, provided it is moderated by digital leadership, as studied by Liao, Li and Liu (2024). However, working hours may increase when working from home due to the absence of physical activities associated with leaving the office.

To maximize the tech-savvy nature of Generation Z, (Öngel, Günsel, Gençer-Çelik, Altındağ & Tatlı, 2024) studied the influence of digital leadership on individual creativity and employee performance. Their study posits that the digital era requires specific leadership characteristics to effectively navigate uncertain competition.

Erhan, Uzunbacak and Aydin (2022) urged the need to shift from conventional to digital leadership, as it provides opportunities for telework, which can lead to significant efficiencies and cost reductions associated with maintaining physical workplaces. They also examined the relationship between digital leadership, work innovation, and job performance.

While previous research primarily focused on Generation Z's job satisfaction in relation to job performance, this study introduces digital transformation and digital leadership as novel factors. This study was conducted to identify the gap in previous research, particularly by positioning the role of job satisfaction as a mediating variable focused on Gen Z. In previous studies, the role of job satisfaction as a mediating factor for the analysis unit of Gen Z was still very rare. Additionally, this study also addressed the gap concerning the factors that affect the job performance of Gen Z compared to those of the previous generation. By addressing inconsistencies in prior research findings, this paper offers implications for organizations on how to manage Generation Z's job performance. It emphasizes maximizing their technological proficiency and enhancing their job satisfaction through the hygiene and motivation factors of the two-factor theory, ultimately leading to improved job performance in the workplace.

2. Literature Review and Hypothesis Development

2.1. Digital Leadership

The global COVID-19 pandemic has imposed mobility restrictions, prompting a digital transformation and significant changes in social and management systems. This condition required the adoption of remote work and technological skills for survival (Öngel et al., 2024). Digital leadership combines transformational leadership with digital technology, fostering innovative behaviors within the workplace (Gao & Gao, 2024).

Digital leadership is based on the concept of e-leadership, which brings leaders and employees closer together through virtual spaces, blurring traditional hierarchical boundaries. In e-leadership, leaders may merely observe rather than actively engage. Portals are created to store data and submit regular reports with minimal interaction between leaders and employees (Liao et al., 2024).

The challenges posed by a VUCA world compel leaders to transition to digital leadership, fostering collaboration and engagement at all levels of the organization, not only top-down decision-making but also middle-up-bottom decision styles. The key to thriving in a VUCA world lies in swift decision-making and effective problem-solving, alongside maintaining control through strategic digital integration and strengthening leadership skills and capacities (Pandey, Majumdar, Hassan & Benayenah, 2023).

2.2. Research Hypotheses

H₁: Digital leadership influences job performance.

Digital leadership has an increasing effect on the job performance of Generation Z due to the tendency for this leadership style to adapt to the values and preferences of Gen Z, who are tech-savvy and prioritize technology in their daily activities, both personally and at work. Pandey et al. (2023) argue that digital leadership is essential for organizations embarking on their digital transformation journey. They contend that technology implementation is secondary to preparing employees to adapt to new technologies and work styles, as well as cultivating a new culture of work behaviors, decision-making styles, and performance management systems. Rakovic, Maric, Djordjevic-Milutinovic, Vukovic and Bjekic (2024) state that digital leadership is linked to the competencies, behaviors, and practices of leaders that inspire and motivate employees during digital transformation and adoption. Digital leaders create opportunities for employee development, abilities, and personal growth, as well as enthusiasm for technology use at work, fostering constructive virtual teams (Zhuang, Liu & Yu, 2024). According to Gao and Gao (2024), digital leadership is associated with virtual leadership and e-leadership. Virtual leadership transcends geographical boundaries among employees and relies on technology for communication and collaboration, while e-leadership influences employees' thinking, feelings, attitudes, and behaviors through technology. When leaders synergize both aspects, it can lead to enhanced employee performance that generates profit and organizational sustainability.

H₂: Digital transformation influences job performance.

Digital transformation is not limited to developed countries; even in less affluent nations, technology is being adopted globally, with variations in the devices used. Research in Pakistan indicates that digital adoption from the early exposure to technology during Generation Z's formative years fosters habitual technology adoption, leading them to expect employers to provide the latest technology for daily operations to enhance job performance and satisfaction (Sfodera, Cain & Di-Leo, 2024). The research demonstrates that digital leadership can enhance employee performance through innovation, improved service levels, and the promotion of radical green innovation, ultimately contributing to job satisfaction (Gao & Gao, 2024). From employees' perspectives, digital leadership facilitates telework, providing a quieter workspace free from distractions while still allowing for strict control from their superiors via daily report submissions, which enhances job performance by fostering a satisfied and positive mental state at work. A study involving 326 team members from 36 enterprises in China indicated that most employees feel greater autonomy in telework. Even though some express concerns about the imbalance between work and personal life, many report increased focus on their tasks due to the absence of office distractions and reduced commuting fatigue (Liao et al., 2024).

H₃: Job satisfaction influences job performance.

Several previous studies have revealed that for Generation Z, job satisfaction is an important predictor of job performance, even tending to be stronger than in previous generations because Gen Z values the meaning of work, work flexibility, and life balance. When job satisfaction is high, Gen Z will demonstrate high motivation, dominant creativity, and loyalty, which significantly impacts performance improvement. Given the unique characteristics of the existing labor force that will dominate the emerging workforce, effectively managing Generation Z's motivation and expectations is crucial for maintaining organizational sustainability (Kudaibergenov, Bolatova, Kurmanalina & Balginova, 2024). Another study identified six significant factors contributing to Generation Z's job satisfaction, which encourages them to stay permanently in the organization. These features include support from superiors, attachment to the company, job satisfaction, contributions to the company, emotional support, and shared values aligned with the company's strong vision and mission (Bautista & Cahigas, 2024).

H₄: Digital leadership influences job satisfaction

Digital leadership tends to encourage flexible work systems that do not require being in the office, such as remote work, hybrid models, and flexible working hours, with the help of technology. The presence of digital leaders makes Gen Z feel that their personal and work needs are more balanced, ultimately increasing job satisfaction. A study involving 352 Romanian undergraduate students found that their capabilities, skills, and

competencies in adopting updated technology contribute to job satisfaction at both individual and workplace levels (Toma & Hudea, 2024).

H₅: Digital transformation influences job satisfaction.

Digital transformation for Gen Z is a favored work situation because it allows for remote, hybrid, and flexible hours with the help of various applications such as cloud services, collaboration tools, and mobile working. As stated by previous researchers, Gen Z values flexibility and work-life balance so much that they feel satisfied because they can adapt their work to their lifestyle. Digital leadership brings significant changes to organizational procedures and systems. Many enterprises offer multiple platforms and systems for improved and expedited services and decision-making. While these conditions may suit Generation Z, they may not be as compatible with older generations, particularly those who struggle to adapt to new devices. Conversely, traditional leadership may resonate with older generations, but in many cases, it often diminishes Generation Z's willingness to remain with a company due to the dynamics of superior-subordinate relationships (Ramírez-Herrero, Ortiz-de-Urbina-Criado & Medina-Merodio, 2024).

H₆: Digital leadership influences job performance, mediated by job satisfaction.

Digital leadership is inherently capable of forming a modern and adaptive work climate, but some researchers have found its effect on performance to be smaller over time. When mediated by job satisfaction, it acts as a psychological mechanism that translates digital leadership practices into motivation, positive energy, and engagement, which then encourage increased job performance. Herzberg's two-factor theory, established through studies of 200 engineers and accountants in various fields during the 1950s and 1960s, sought to explore employees' feelings about what motivates them to perform better. Herzberg identified two factors, hygiene and motivation, that lead to employee satisfaction. Motivation factors encompass elements related to deeper satisfaction, such as challenging jobs, career development, and pride in job achievements. Hygiene factors include more basic needs, such as decent wages, a comfortable and safe working environment, and relationships among coworkers and the employees' relationships with superiors (Lee et al., 2022). A study involving current and former employees in the IT industry in South Korea, conducted by Lee et al. (2022), found that both motivation and hygiene factors significantly impact job satisfaction across various industries. Bhatt, Chitranshi and Mehta (2022) indicated that while hygiene factors also influence job satisfaction, their variables—(a) working conditions, (b) supervisors' relationships, and (c) company policies—had f-values below 0.5. On the other hand, motivation factors—(a) job itself, (b) career enhancement, and (c) job challenges—had f-values above 0.8, which means they are very significant to millennial job satisfaction in India.

H₇: Digital transformation influences job performance, mediated by job satisfaction.

Digital transformation is expected to create work efficiency and flexibility. Previous research has found that the effect on new performance will be optimal if employees feel job satisfaction. Some researchers have previously identified job satisfaction as an important mediator because, according to the Two-Factor Theory, supportive working conditions (hygiene factors) and opportunities for development (motivators) related to digital transformation will increase satisfaction, which, in turn, encourages better performance. A study in Kazakhstan revealed that the two-factor theory remains consistent across genders, indicating that gender does not significantly influence the theory. Interestingly, males tend to prioritize compensation benefits in company policies, while females focus more on interpersonal relationships among colleagues and superiors that support operational activities. This study also introduced performance appraisal as a motivational factor that significantly impacts job satisfaction (Kudaibergenov et al., 2024). Research conducted by Yadav (2022), involving 841 respondents in the IT and manufacturing sectors, found that the dependent variable was impacted by all dimensions of the two-factor theory. The highest score shown was 0.791 in the motivational factors for recognition and career growth, while in the hygiene factors, the health and well-being dimensions scored 0.738, the highest.

3. Methods

3.1. Sampling and Data Collection

The population for this research comprised the total Generation Z in Indonesia, estimated to be nearly 75 million individuals. This study focuses on a sample of freelance authors suitable as a research sample because they are

representative of Gen Z, who tend to choose flexible, digital-based jobs, rely heavily on digital technology at work, and remain in the digital leadership system as leaders. The sampling method employed was non-probability sampling, specifically utilizing purposive sampling techniques. According to Hair, Sarstedt, Ringle and Gudergan (2018), the number of indicators requires multiplication by either a minimum of 5 or a maximum of 10. Consequently, with 44 indicators in this research, the required sample size was $44 \times 5 = 220$ respondents.

3.2. Research Framework and Operational Variables

3.2.1. Research Framework

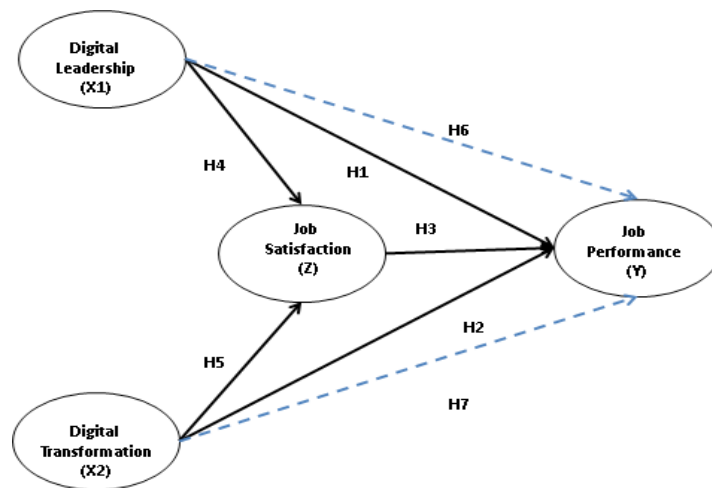


Figure 1. Research Framework

This research framework depicting the impact of digital leadership (X_1) and digital transformation (X_2) on job performance (Y), mediated by job satisfaction (Z), is shown in Figure 1.

3.2.2. Operational Variables

This research employed quantitative methods by gathering respondents' opinions through questionnaires. The variables used were categorized by their functions, with measurement scales based on a Likert Scale ranging from 1 to 5: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree, as cited by El-Menawy and Saleh (2023).

Independent variables

Digital Leadership. According to Ivasciuc et al. (2022), digital leadership focuses on team productivity while working remotely at home or at a physical workplace. It also relies on how leaders provide positive support and encourage trust among each team member. Mosca and Merkle (2024) focused on team leaders' capabilities to lead the team and how agile they are in adapting to new technologies.

Digital transformation encompasses a set of concepts leading to implementation in daily operations through technological transformation. According to Ackermann, Schell and Kopp (2021), digital transformation involves (a) setting organizational purposes, (b) addressing digitalization, and (c) establishing authority and accountability.

Mediating variable

The mediating variable in this research was job satisfaction. Lee et al. (2022) cited Herzberg's two-factor theory (Büyükbese, Dikbaş, Çavuş & Asiltürk, 2023), which categorizes job satisfaction into two distinct factors: (1) hygiene factors and (2) motivators. Hygiene factors include company vision and mission, supervision and technical support, interpersonal relations, physical work conditions, benefits and wages, work-life balance, and job security. Motivators relate to the job itself, recognition, and career advancement.

Dependent variable

Job Performance. The dependent variable in this research was job performance. Kaur and Kaur (2023) stated that job performance is related to the development of employees' knowledge, skills, and abilities (KSA), which

enable them to perform effectively, make sound decisions, and receive appropriate benefits and contributions for their job results.

3.3. Validity and Reliability Test

In this study, a validity pretest was carried out using a standard loading factor (λ) size of ≥ 0.50 . If the loading factor of each statement is ≥ 0.50 , then the statement is declared valid and can be used for this research. The validity pretest was conducted with 30 respondents. For the measure used to evaluate the convergent validity of latent constructs in the SEM model, Average Variance Extracted (AVE) was employed with a standard AVE value of ≥ 0.50 . Meanwhile, the internal reliability measure of the latent construct uses Composite Reliability (CR) with a standard CR value of ≥ 0.70 . Data from the results of the validity test, AVE, and CR can be seen in Table 1 below.

No.	Variables	Dimensions	Indicators	Statements	(λ)	AVE	CR
1	Digital Leadership	Team Productivity	Achieve target while working remote or in the physical workplace	1. I feel comfortable while working from home.	0.805	0.755	0.902
				2. I can achieve target even though I don't come to the office every day.	0.785		
				3. Our team can achieve target even though we work remotely from diferent place.	0.801		
		Leaders Support	Trust and support given by the leaders to team members	1. My manager always support if I find problems.	0.916		
				2. My manager trust us that we can achieve target even though we work remotely.	0.882		
				3. My manager trust us that we are capable to adopt new technology easily	0.908		
		Leaders Capabilities	Leaders KSA on handling jobs using new technologies	1. My manager has sufficient ability to lead our team from office.	0.835		
				2. My manager has skills to adopt new technology easiliy	0.813		
				3. My manager train us how to adopt new technologies	0.862		
2	Digital Transformation	Setting Organization Purposes	Setting Company Objectives	1. Company objectives define by manager effectively every year.	0.780	0.726	0.913
				2. Company's vision, missions and goals were informed to employees clearly.	0.778		
		Addressing Digitalization	R&D work for continuos innovation	1. The company has professional R&D team for research and digital innovation	0.801		
			Agility to face VUCA	2. The company has the agility to face uncertainty change in technology.	0.792		
			Company budgetting	3. The company has significant budget or sourcing for innovation in digitalizaiothn	0.810		
		Authority and Accountability	Flexible Hierarchy	1. Employees has authority in problem solving independently	0.882		
				2. Employees have an opportunity to discussions or to criticizes to the manager.	0.892		
			Hybrid working environment	1. After Covid-19, employees often work remotely from home	0.960		
				2. Company provides sufficiently device for those who work from home	0.964		

No.	Variables	Dimensions	Indicators	Statements	(λ)	AVE	CR
				3. Manager trusts employees to perform good with minimum supervisions	0.962		
3	Job Satisfaction	Hygiene Factors	Company Vision and Mission	1. Company informs its vision, mission to employees clearly	0.905	0.838	0.912
				2. Company inform its strategic plan divided to everyone target clearly..	0.901		
			Supervision and Technical	1. Manager gives me a target every year.	0.909		
				2. I have clear job description	0.899		
				3. My manager gives support if I have trouble..	0.911		
			Interpersonal Relations	1. I have good relationship with my superiors	0.892		
				2. I have good relationship with my colleagues	0.913		
				3. I have good relationship with my subordinates	0.921		
			Physical Working Condition	1. I have comfort working space in the office	0.838		
			Benefit and Wages	1. I am satisfied with monthly salary	0.899		
				2. I am satisfied with yearly performance bonus	0.909		
			Work Life Balance	1. I have enough time to do my tasks	0.792		
				2. I have enough leisure time after work	0.992		
			Job Security	1. I feel like I will be working long term in the company	0.898		
				2. Company covers my the life insurance	0.908		
		Motivation Factors	Job Itself	1. I am proud of my job I handle	0.856		
			Recognition	1. Manager appreciates my good work	0.905		
				2. Company pays extra bonus for my good work	0.910		
			Career advancement	1. My abilities develop significantly in this company	0.892		
				2. I believe my career growth in this company	0.899		
4	Job Performance	Knowledge, Skills, Ability (KSA)	KSA Development	1. I am able to finish job before deadline	0.701	0.750	0.856
				2. I am capable to do my job	0.600		
				3. I am capable of handling issues and giving best solutions on my problems	0.578		
			Benefit and Contribution	1. I get a good annual bonus	0.782		
				2. I contribute to the company growth	0.708		

Table 1. Validity and Reliability Test

The data in Table 1 shows that all standardized factor loading (λ) for all statements values ≥ 0.50 , meaning that all statements are declared to have good validity. Similarly, the reliability of the measurement model is shown from the CR value ≥ 0.70 and VE ≥ 0.50 so that it is declared good and can be used for further analysis.

3.4. Data Analysis

The summary of the respondents' profiles is presented at table 2 below.

The data presented in Table 2 indicates that the majority of authors are female (87%) aged 20–25 years, and they consider themselves full-time entrepreneurs, primarily working as freelance authors on online writing platforms. This data can represent the opinions of Generation Z in this research. Most respondents have more than five years of experience as online authors, primarily writing horror or romance fiction. They typically begin their writing careers on unpaid platforms such as Wattpad during high school. After 1–3 years of writing, they transition to paid platforms, often multinational online platforms such as Fizzo, Good Novel, Innovel, and others. The authors' fees on these platforms range approximately from USD 300 to USD 30,000, depending on reader engagement, which is significant for beginner or junior authors, as it can be comparable to having a monthly fee that is almost similar to the minimum wages of full-time employees required to work in an office five times a week. After graduating from college or high school, many prefer this profession due to the absence of a complicated recruitment process; the only skills required are writing on online platforms and meeting performance targets. This trend indicates that Generation Z tends to be independent entrepreneurs utilizing online platforms to work autonomously, as it allows them the freedom to express their creativity through writing.

Profile	(n = 389)	Percentage
Gender		
Male	50	13%
Female	339	87%
Type of Publisher		
Independent Publisher	47	12%
Major Publisher	10	3%
Online Writing Platform	332	85%
Main Activities Besides Writing		
Full-Time Employee	97	25%
Profile		
Full-Time Employee and Small Business Owner (Entrepreneur)	2	1%
Full-Time Entrepreneur	250	64%
College Students	33	8%
College Students, Full-Time Employees, and Entrepreneurs	2	1%
College Students and Entrepreneurs	5	1%
Expertise in Writing (Years)		
1–3 Years	67	17%
> 5 Years	322	83%
Ages		
21–25 Years old	385	99%
Above 30 Years old	4	1%
Genre		
Fan-Fiction	5	1%
Horror	243	62%
Non-Fiction	57	15%
Romance	78	20%
Thriller	6	2%

Table 2. Respondents Profile Summary (SEM AMOS, July 2024)

4. Results and Discussion

4.1. Descriptive Statistics

The table 3 below summarizes the mean calculations for each variable.

The digital leadership variable has three dimensions, with the highest score (4.48) in the technical abilities of managers. Most respondents believe they have hands-on managers who actively engage in their projects. However, the lowest score (3.66) was in recorded team productivity, indicating some doubt about whether the hybrid team could achieve the monthly target well.

The digital transformation variable has four dimensions, with the highest score (3.39) in the hybrid working environment, suggesting that most respondents feel comfortable working primarily from home, as it allows them to manage multiple tasks simultaneously. Conversely, the lowest score (2.85) was recorded in the shared vision and mission, indicating that respondents perceive the company and its managers primarily communicate monthly targets but lack clarity regarding the overall vision and mission.

Variables	Dimensions	Mean	Standard Deviation
Digital Leadership (4.05)	Team Productivity	3.66	1.10
	Leaders Support	4.02	0.70
	Leaders Capabilities	4.48	0.87
Digital Transformation (3.12)	Setting Organization Purposes	2.85	0.55
	Addressing Digitalization	3.10	0.75
	Authority and Accountability	3.39	0.80
Job Satisfaction (3.79)	Hygiene Factors	3.38	0.77
	Motivation Factors	4.21	0.78
Job Performance (3.39)	Knowledge, Skills, and Abilities (KSA)	3.82	1.07
	Benefits and Contributions	2.97	0.76

Table 3. Descriptive Statistics Analysis (SEM AMOS, July 2024)

The job satisfaction variable has two dimensions, with the highest score (4.21) in motivation factors, indicating that most respondents feel motivated while working in this digital and hybrid environment. The lowest score (3.38) was in hygiene factors.

4.2. Structural Model Fit

This research comprised two structural models that were tested. The first structure examined the influence of digital leadership and digital transformation on job satisfaction. The second structure investigated the influence of digital leadership, digital transformation, and job satisfaction on job performance. The following presents the results of the hypothesis structural model calculations using the IBM AMOS Version 23.0 program, with a confidence level of 95%.

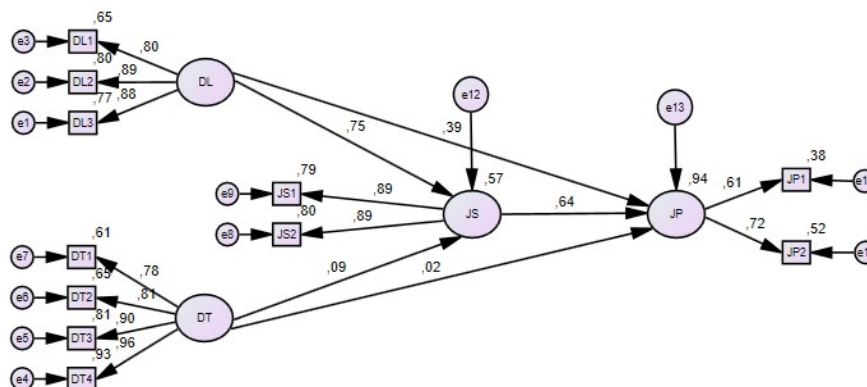


Figure 2. Structural Model Fit (SEM AMOS, July 2024)

Figure 2 illustrates the statistical testing results on structural model measurements, yielding the path coefficients for two structural equations as follows:

$$JS = 0.75*DL + 0.09*DT, \text{ Error var.} = 0.43, R^2 = 0.57 \quad (1)$$

$$JP = 0.39*DL + 0.02*DT + 0.64*JS, \text{ Error var.} = 0.06, R^2 = 0.94 \quad (2)$$

Remarks:

JS = Job Satisfaction

JP = Job Performance

DL = Digital Leadership

DT = Digital Transformation

Equation (1) shows that digital leadership and digital transformation are positively correlated with job satisfaction. This indicates that better digital leadership and digital transformation will enhance job satisfaction, with a total influence of 57%. Equation (2) demonstrates that digital leadership, digital transformation, and job satisfaction are positively correlated with job performance. This suggests that enhancements in digital leadership, digital transformation, and job satisfaction will lead to improved job performance within the organization.

From Equation (1), it can be seen that digital leadership and digital transformation have a positive relationship with job satisfaction. This means that improvements in digital leadership and digital transformation will increase job satisfaction, accounting for a total influence of 57%. Furthermore, in Equation (2), digital leadership, digital transformation, and job satisfaction have a positive relationship with job performance. This means that the better digital leadership, digital transformation, and job satisfaction are, the better job performance will increase, with a total influence of 94%.

Before testing the structural model, a goodness-of-fit (GoF) index assessment was conducted to determine whether the theoretical model aligns well with the empirical data collected through the questionnaire instruments. The results of this assessment are presented in Table 4.

GOF	Acceptable Match Level	Model Index	Explanation
Chi-square	$\chi^2 \leq 2df$ (good fit), $2df < \chi^2 \leq 3df$ (marginal fit)	$2df < 74, 7 < 3df$	Marginal Fit
P-value	$P \geq 0.05$	0.01	Bad Fit
GFI	$GFI \geq 0.9$ (good fit), $0.8 \leq GFI \leq 0.9$ (marginal fit)	0.97	Good Fit
RMR	$RMR \leq 0.5$	0.03	Good Fit
RMSEA	$0.05 < RMSEA \leq 0.08$ (good fit), $0.08 < RMSEA \leq 1$ (marginal fit)	0.06	Good Fit
NNFI	$NNFI \geq 0.9$ (good fit), $0.8 \leq NNFI \leq 0.9$ (marginal fit)	0.98	Good Fit
NFI	$NFI \geq 0.9$ (good fit), $0.8 \leq NFI \leq 0.9$ (marginal fit)	0.97	Good Fit
AGFI	$AGFI \geq 0.9$ (good fit), $0.8 \leq AGFI \leq 0.9$ (marginal fit)	0.93	Good Fit
RFI	$RFI \geq 0.9$ (good fit), $0.8 \leq RFI \leq 0.9$ (marginal fit)	0.96	Good Fit
CFI	$CFI \geq 0.9$ (good fit), $0.8 \leq CFI \leq 0.9$ (marginal fit)	0.99	Good Fit

Table 4. Goodness-of-Fit (SEM AMOS, July 2024)

Table 4 indicates that out of 10 GoF indicators, one indicator falls into the bad fit category, while the others are categorized as a marginal or good fit. Consequently, the research model proceeds to hypothesis testing.

4.3. Statistical Hypothesis Testing

The following is a summary of the hypothesis tests performed using IBM AMOS Version 23.0, with a confidence level of 95%. The significance level was determined by t calculation > 1.96 or p -values < 0.05 .

Based on the figure above, it can be observed that the t_{count} value for the digital leadership variable concerning job satisfaction was 16.08, which is greater than the t_{crisis} of 1.96. Since the t_{count} value exceeds the t_{crisis} , at a margin of error of 5%, we accept H1 and reject H0. Therefore, we conclude that digital transformation

positively and significantly affects job satisfaction. The relationship between digital leadership and job satisfaction is positive, indicating that an increase in digital leadership correlates with an increase in job satisfaction and vice versa.

The t-count value for the digital transformation variable concerning job satisfaction was 2.26, which also exceeds the t-crisis of 1.96. Consequently, we accept H1 and reject H0, concluding that digital leadership has a positive and significant effect on job satisfaction. The relationship between digital transformation and job satisfaction is similarly positive, meaning that when there is an increase in digital transformation, it leads to an increase in job satisfaction, and vice versa.

Hypothesis	Variable	Path Coefficient	t-count > 1.96	Summary Hypothesis
H1	DL → JS	0.75	16.08	Accepted
H2	DT → JS	0.09	2.26	Accepted
H3	DL → JP	0.39	4.96	Accepted
H4	DT → JP	0.02	0.41	Rejected
Mediating Hypothesis				
H5	DL → JS → JP	0.04	7.11	Accepted
H6	DT → JS → JP	0.07	2.17	Accepted

Table 5. Hypothesis Test Results (SEM AMOS, July 2024)

The results of the calculation regarding the mediating role of job satisfaction in the relationship between digital leadership, digital transformation, and job performance were assessed using the Sobel test. The t-value of the Sobel test for the digital leadership variable was 7.11, while the t-value for the digital transformation variable was 2.17. As with partial testing, these t-values are compared to the threshold of 1.96. Both Sobel test results indicate values greater than 1.96, confirming that job satisfaction positively and significantly mediates the relationship between digital leadership and digital transformation in relation to job performance.

5. Conclusions and Limitations

5.1. Conclusions

The study involved two independent variables, one dependent variable, and one mediating variable. Notably, 89% of the respondents were female, aged 21–25, who identified as entrepreneurs in creative fields, particularly in writing online fiction novels across approximately 20 paid reading and writing platforms. They demonstrated strong digital literacy and worked independently from home with minimal supervision.

Among the ten dimensions used, the highest score was in digital leadership, particularly in the dimension of leaders' capabilities in handling jobs using new technologies. This indicates that Generation Z holds managers with technical skills and extensive knowledge in high regard, especially those who are capable of leading and managing teams remotely. Conversely, the lowest score was in digital transformation, specifically in the dimension of company vision, where Gen Z does not receive clear and open information about the organization's vision and mission and lacks clear strategic plans for each freelance employee. This suggests that despite Generation Z's high digital literacy, they still prefer companies that provide them with complete information about short- and long-term company planning. In addition, in the dimension of addressing digitalization, there is a low employee perception of agility to face VUCA, especially regarding support for equipment that keeps pace with rapid technological changes. Currently, most of them use their personal devices. Support from the company is essential for writers to enhance their work as online authors, as their current equipment lacks the speed and visualization capabilities needed for tasks such as image display and editing.

There are four hypotheses regarding direct influences, of which three were supported: digital leadership, digital transformation to job satisfaction, and digital leadership to job performance. However, the hypothesis regarding digital transformation to job performance was not supported. The mediating role of job satisfaction in the relationship between digital leadership and digital transformation on job performance yielded partial mediation results, as the estimated value of the mediation effect was smaller than that of the direct influences. This means

that digital leadership can improve performance both directly through direction, the use of technology, and work strategies, and indirectly by building job satisfaction that encourages employee motivation and involvement. Thus, job satisfaction plays an important role but is not the only mechanism that explains the influence of digital leadership on performance. In addition, digital transformation can directly improve performance through the provision of technology, process efficiency, and access to information, as well as indirectly through increased job satisfaction that encourages employee motivation, engagement, and commitment. Thus, job satisfaction reinforces the influence of digital transformation on performance, although the direct impact of digitalization implementation remains significant without completely relying on job satisfaction levels.

5.2. Research Limitations

Generation Z individuals are increasingly working as freelance authors on online platforms. Future research could explore other creative industries, such as content creation and visual design, particularly those related to IT. These areas are noteworthy because they also operate with high levels of creativity and work independently.

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