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Talent Management and Talent Retention: The Mediating Role of Career Adaptability Among Generation Z at Digital Startups in Makassar, Indonesia

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The author(s) declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

ABSTRACT

Purpose: This study aims to analyze the effect of Talent Management on Talent Retention, with Career Adaptability acting as a mediator, among Generation Z employees at digital startups in Makassar.

Research Design and Methodology: This study employs a quantitative approach with an explanatory research design. Data were collected through a survey of 69 Generation Z employees selected using purposive sampling. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0.

Findings and Discussion: The results of the study show that Talent Management has a positive effect on Career Adaptability and Talent Retention. Career Adaptability also has a positive effect on Talent Retention and mediates the relationship between Talent Management and Talent Retention. These findings indicate that effective talent management can enhance career adaptability and encourage employees to remain with the organization.

Implications: This study has implications for digital startups seeking to develop talent management strategies based on career development and adaptability. The originality of this study lies in its examination of the role of Career Adaptability as a mediating mechanism in the relationship between Talent Management and Talent Retention in the context of Generation Z.

Introduction

The era of artificial intelligence (Artificial Intelligence/AI) has transformed the global workforce landscape, as evidenced by the increase in AI adoption by employees from 30% in 2023 to 76% in 2025. This shift reflects not only the adoption of technology but also a reconfiguration of how work is performed, decisions are made, and work effectiveness is assessed. The Future of Jobs Report projects the creation of a net 78 million new roles by 2030, although 22% of current jobs are expected to undergo structural changes (World Economic Forum, 2025). In this context, talent management leaders face the AI revolution, market uncertainty, shifting skill requirements, and regrettable retention (Gartner, 2025). The proportion of human resources leaders planning or implementing generative AI in talent management has also increased from 19% in June 2023 to 61% in January 2025 (Arora & Damrala, 2025). Strategically managed digital transformation can enhance organizational productivity, sustainability, and resilience, whereas improper management can worsen retention due to a reduced sense of security and career certainty among employees (Fernandez-Vidal et al., 2024). This challenge is even more complex in digital startups because employees' attitudes toward AI vary by sector and implementation context and influence their commitment and intention to stay (Nørskov et al., 2025). Therefore, the use of AI must be accompanied by tangible career growth opportunities to ensure that regrettable attrition does not threaten business sustainability (Lightspeed Venture Partners, 2025).

These issues are particularly relevant to Generation Z—individuals born between 1997 and 2012—because conventional talent management theories, including employer branding, cannot be applied without adapting them to the characteristics of this generation (Ruiz-Palomino et al., 2024). As digital natives, Generation Z prioritizes technology, career growth, flexibility, and meaningful work (Choudhary & Pandita, 2025). However, despite their rapid adoption of generative AI, this generation also experiences high levels of anxiety regarding automation, as found among 68% of Generation Z workers in an Oliver Wyman Forum survey of 300,000 respondents. This paradox may affect their career adaptability and decisions to stay, while an organization's failure to meet their expectations could increase turnover and disrupt a startup's stability (Rohayati et al., 2023). In the Indonesian context, this issue is becoming increasingly important as there will be more than 2,500 active startups by 2025, supported by an 83% internet penetration rate and increasingly conducive regulations (Pacificmedia.org, 2025). Startup growth is also taking place in Makassar in the logistics, fisheries technology, and local digital services sectors (Bebasketik, 2025), but organizational support and workload management still determine Generation Z's decision to stay (Daengku Journal, 2025). Since contextual research in Makassar remains limited, talent management needs to be developed as a strategy encompassing attraction, development, retention, performance management, sustainable leadership, adaptive evaluation, personalized training, and predictive analytics (Orel et al., 2023). These strategies have been shown to increase engagement, performance, and retention among young employees (Kurniady et al., 2025; Ananda & Achmad, 2025).

The strategic objective of implementing talent management is to retain employees who possess key competencies and make significant contributions. Talent retention does not merely mean preventing employees from leaving the organization but also creating conditions that encourage talented employees to remain engaged and contribute optimally (Sparrow et al., 2014). Competency mapping, employee engagement, performance management, and career development have been shown to have a strong correlation with retention in the information and communications technology sector (Al-Dalahmeh et al., 2020). Nevertheless, retention among Generation Z has its own distinct characteristics. A survey of 919 employees aged 22-27 revealed that Generation Z values career mobility more than job security (Gartner, 2025). Therefore, retention for this generation is not merely about loyalty but rather about the alignment of the organization's career opportunities with personal aspirations. Employee engagement was also found to mediate the relationship between talent management and retention, indicating that this relationship involves both psychological and organizational mechanisms (Azan et al., 2022).

One relevant psychological mechanism for coping with changes driven by AI is career adaptability. According to Career Construction Theory, career adaptability refers to an individual's psychosocial readiness and resources for addressing vocational development tasks, career transitions, and the pressures of a changing work environment (Savickas, 2013). This construct encompasses four dimensions, or the 4Cs: concern for one's future career, control over one's career path, curiosity about exploring career options, and confidence in overcoming career obstacles. Career adaptability has been shown to negatively influence turnover intentions through perceptions of career opportunities; the higher the adaptability, the lower the tendency to leave the organization (Rasheed et al., 2020). Career adaptability also enhances job embeddedness—an individual's attachment to their work—which in turn contributes to retention (Zaman et al., 2023). A systematic review in Southeast Asia confirms that career adaptability plays a mediating role in the relationship between organizational factors and individual career outcomes (Asok Kumar et al., 2024).

Although talent management, career adaptability, and talent retention have been studied, several important gaps remain. First, the mediating role of career adaptability in the relationship between talent management and Generation Z talent retention at digital startups has not been extensively studied, particularly in the context of Eastern Indonesia. Peng et al. (2021) demonstrated that career adaptability mediates the relationship between regulatory orientation and proactive career behavior, but did not examine talent management or retention. Second, research integrating AI dynamics into talent management models for Generation Z at digital startups in developing cities like Makassar remains limited. Leong et al. (2025) identified a complex interaction between career adaptability and anxiety toward AI in influencing work engagement, but did not explicitly address retention or talent management. Third, research within the geographical and sectoral context of Eastern Indonesia—particularly Makassar as a burgeoning hub for digital startups—remains extremely scarce.

This gap indicates that the relationship between talent management and retention has not been sufficiently explored directly. Organizations can provide recruitment processes, development programs, performance evaluations, and career opportunities, but their effectiveness in retaining Generation Z likely depends on their ability to enhance career adaptability. Career adaptability has the potential to serve as a mechanism that channels organizational support—delivered through talent management—into readiness to face change, job engagement, and the decision to stay. The need to test this mechanism is particularly strong in digital startup environments facing rapid technological change, anxiety about AI, high job mobility, and Generation Z's distinct career expectations. Research by Faeni et al. (2023) and Zhang et al. (2025) has shown that human resource management in the digital age and AI-based technostress influence work behavior, but these studies have not yet tested this mediation model.

Based on these gaps, this study examines whether talent management influences talent retention and career adaptability, whether career adaptability influences talent retention, and whether career adaptability mediates the effect of talent management on Generation Z talent retention at digital startups in Makassar. This study aims to analyze all of these relationships. Its theoretical novelty lies in the integration of Career Construction Theory (Savickas, 2013), Conservation of Resources Theory (Hobfoll, 1989, 2001), and Social Exchange Theory into a single mediation model that positions career adaptability as the linking mechanism between talent management and talent retention. Its empirical novelty lies in testing the model on Generation Z at digital startups in Makassar, thereby addressing gaps in the literature regarding Eastern Indonesia. The findings are expected to expand human resource management theory in the AI era and serve as a foundation for developing evidence-based retention strategies.

Literature Review

Talent Management

Talent management is a strategic approach to human resource management that aims to ensure an organization can attract, develop, and retain individuals who make significant contributions to achieving the organization's goals. Unlike traditional approaches that focus solely on recruitment and employee administration, modern talent management views employees as strategic assets that must be managed through systems of competency development, performance management, and continuous career planning. From the perspective of strategic talent management, an organization's success is largely determined by its ability to identify talented individuals, place them in strategic positions, and create development mechanisms that enhance their long-term contributions to the organization (Hashai & Zahra, 2022). Therefore, talent management is not only about acquiring high-quality employees but also about building a work environment capable of retaining and optimizing that talent.

Advances in digital technology and artificial intelligence (AI) have expanded talent management practices through the use of talent analytics in human resources decision-making processes. The use of technology enables organizations to identify competencies, predict employee behavior, assess skill needs, and formulate talent development strategies more accurately and in a more data-driven way (Qin et al., 2023). In the context of an increasingly dynamic work environment, the talent management paradigm has also shifted from an exclusive approach focused solely on identifying high-potential individuals toward a more authentic, inclusive, and sustainable talent development approach. Organizations are not only required to identify talented individuals but also to provide learning opportunities, capacity-building, and career support so that employees can adapt to changes in their roles (Purwanto et al., 2025). This approach is becoming increasingly important in technology-based organizations, such as digital startups, which face intense competition in attracting and retaining high-quality talent.

The effectiveness of talent management is ultimately reflected in an organization's ability to enhance employee engagement and retain talent (talent retention). Talent management practices integrated with employer branding and employee engagement have been shown to strengthen the psychological bond between employees and the organization, thereby increasing employees' desire to stay (Chopra et al., 2024). In an increasingly competitive job market, strategies to attract and retain talent are becoming more critical as employees exhibit higher career mobility and have more job alternatives (the great resignation) (Patrick et al., 2023). Furthermore, career development, employee empowerment, job satisfaction, and organizational engagement serve as key mechanisms that enhance the effectiveness of talent management in improving retention (Jena & Nayak, 2023). Empirical evidence in the Indonesian context indicates that talent management has a positive relationship with talent attraction, talent retention, and organizational performance, highlighting the importance of talent management as a strategy for organizational sustainability (Sembiring & Damayanti, 2023). Furthermore, Sitaniapessy et al. (2023) found that the influence of talent management on employee retention is reinforced through organizational commitment as a psychological mechanism linking organizational practices to individuals' decisions to stay. Thus, in the context of digital startups facing technological change, talent competition, and the distinct characteristics of Generation Z workers compared to previous generations, talent management serves as a strategic tool for building a workforce that is adaptive, competent, and committed to the organization over the long term.

Career Adaptability

Career adaptability is an individual's psychosocial capacity that describes a person's readiness to face changes, transitions, and challenges throughout their career journey. This concept is rooted in Career Construction Theory, which explains that individuals do not merely passively accept their career circumstances but actively construct and adapt their career identity and direction based on environmental demands. Career adaptability encompasses four main dimensions: concern (concern for one's future career), control (the ability to influence career decisions), curiosity (exploration of career opportunities), and confidence (confidence in overcoming career obstacles). From this perspective, career adaptability is viewed as a psychological resource that helps individuals respond to job demands, manage change, and engage in career crafting to create a fit between their personal capabilities and the work environment (Nalis et al., 2022). Wang & Li (2024) emphasize that Career Construction Theory provides a theoretical foundation for the idea that career adaptability serves as a crucial mechanism enabling individuals to build career sustainability through active adaptation to social, technological, and organizational changes.

In modern work environments characterized by digital transformation, automation, and career uncertainty, career adaptability is a critical factor determining an individual's success in managing their professional development. Individuals with high levels of career adaptability tend to be better able to evaluate opportunities, make career decisions, and adjust to changing job demands. Research by Li et al. (2023) indicates that career adaptability contributes to career decision satisfaction by enhancing career self-efficacy, suggesting that individuals who believe in their abilities are better able to determine a career path aligned with their personal goals. Furthermore, career adaptability also plays a role in fostering more proactive and adaptive work behaviors. Jeong & Hong (2023) found that career adaptability serves as a mechanism linking an individual's achievement orientation to positive work behavior through social interaction processes within the organization. These findings suggest that career adaptability is not only related to the ability to cope with change but also influences how individuals build relationships, leverage organizational resources, and enhance their contributions in the workplace.

In an organizational context, particularly within technology-based companies and digital startups, career adaptability is closely linked to employee engagement and the decision to remain with the organization. Employees who are able to adapt to changes in their work tend to have higher levels of job embeddedness because they are able to align their personal goals, development opportunities, and the organizational environment. Cai et al. (2023) demonstrate that career adaptability among new employees can be sustained through organizational socialization support, job variety, and job embeddedness. Furthermore, career adaptability also plays a role in enhancing psychological well-being and positive career outcomes through an individual's ability to manage personal resources when facing work-related stress (Çarkıt, 2024). From a modern career perspective, adaptability also supports flexibility and proactive behavior through an individual's ability to shape their work according to their needs and career aspirations (job crafting) (Kundi et al., 2024). Furthermore, Ebner & Paul (2023) demonstrate that adaptive capacity in career decision-making is associated with both subjective and objective career success. Thus, in this study, career adaptability is positioned as a psychological mechanism that explains how talent management practices can help Generation Z develop readiness to face change, increase organizational commitment, and strengthen talent retention at digital startups.

Talent Retention

Talent retention is an organization's strategic ability to retain employees who possess high-value competencies, knowledge, and contributions, ensuring they remain committed and continue to contribute to the achievement of the organization's goals. In an increasingly dynamic business environment, talent retention is not only about reducing employee turnover but also reflects an organization's success in creating work conditions that meet employees' professional, psychological, and career development needs. Allen & Vardaman (2021) explain that an employee's decision to stay or leave an organization is influenced by a combination of individual factors, job characteristics, social relationships, and perceptions of the development opportunities available within the organization. Therefore, talent retention strategies must be viewed as an integral part of strategic human resource management aimed at ensuring the sustainability of the organization's knowledge, innovation, and competitive advantage.

From a modern human resource management perspective, talent retention is influenced by an organization's ability to provide a work environment that supports employee growth and engagement. Practices of sustainable human resource management have been shown to play a role in enhancing employee loyalty and retention by strengthening the organization's social capital, interpersonal relationships, and a sense of belonging to the organization (Cachón-Rodríguez et al., 2022). Furthermore, the development of employees' capacities and competencies is a critical factor, as individuals are more likely to stay when the organization provides opportunities to enhance their skills and advance their careers. Kapur & Tyagi (2023) demonstrate that human capital development serves as a key mechanism linking organizational strategy to improved employee retention. In the context of young workers, particularly Generation Z, factors such as job design, employee well-being, work flexibility, and meaningful work experiences are becoming increasingly important in shaping the decision to remain with an organization. Chen et al. (2023) demonstrate that the quality of job design and individual well-being influence the retention intentions of the new generation of workers, underscoring that organizations need to align their retention strategies with the characteristics and expectations of the modern workforce.

Technological advancements and changing work patterns are also driving organizations to adopt more adaptive approaches to retaining talent. Socially responsible human resource management practices can enhance retention by fostering shared values, improving job satisfaction, and providing positive leadership support (Pham et al., 2023). On the other hand, the use of artificial intelligence and predictive analytics provides organizations with opportunities to identify the root causes of employee turnover and implement more proactive retention interventions (Chung et al., 2023). In the context of the Asian labor market, talent retention strategies are also influenced by work flexibility, work-life balance, rewards, and post-hiring development opportunities (Sean & Ozer, 2024). This is increasingly relevant for Generation Z, who have a different career orientation and value organizational support, flexibility, and opportunities for growth more than mere job stability. Lu et al. (2023) demonstrate that organizational support for the needs of the new generation of workers plays a role in reducing turnover intentions and increasing the decision to stay. Thus, in this study, talent retention is understood as a strategic outcome of an organization's success in building positive work relationships, providing career development opportunities, and enhancing employees' ability to adapt to changes in the work environment. In the context of digital startups, talent retention is becoming increasingly important because the organization's sustainability depends heavily on its ability to retain highly competent individuals who can adapt to technological transformation.

Research Design and Methodology

This study employs a quantitative approach with an explanatory research design to analyze the direct and indirect relationships between Talent Management, Career Adaptability, and Talent Retention among Generation Z employees working at digital startups in Makassar, Indonesia. The explanatory research design was chosen because this study aims to test a conceptual model developed based on theory and prior empirical research, particularly to explain the causal relationships among the variables and the mediating role of Career Adaptability. This study employs a cross-sectional survey design, in which data collection is conducted at a specific point in time using a structured questionnaire. This design is considered appropriate because the study focuses on measuring employees' perceptions of Talent Management practices, career adaptability, and their desire to remain with the digital startup organization.

The population in this study consists of Generation Z employees working at digital startups in Makassar. In this study, Generation Z is defined as individuals born between 1997 and 2012 who have entered the workforce. The sample was selected using purposive sampling based on the following respondent criteria: (1) active employees working at digital startups operating in Makassar, (2) belonging to Generation Z, and (3) having a minimum of three months of tenure to ensure sufficient experience with organizational practices and the work environment. The sample size for this study was 69 respondents, which is considered adequate for analysis using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. The research model consists of three main constructs: Talent Management as the independent variable, Career Adaptability as the mediating variable, and Talent Retention as the dependent variable.

Data collection was conducted using a structured questionnaire via both online and offline methods. The online distribution of the questionnaire was carried out using Google Forms through startup communities, professional networks, and various relevant digital platforms. Meanwhile, offline data collection was conducted through direct visits to several digital startups, coworking spaces, and business incubators in Makassar to increase the response rate and ensure that the respondents' characteristics met the study criteria. All research indicators were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The Talent Management variable was measured across several dimensions: talent attraction, talent development, performance management, career development, succession planning, and retention practices—adapted from the strategic talent management literature. The Career Adaptability variable was measured using four dimensions developed by Savickas and Porfeli (2012), namely career concern, career control, career curiosity, and career confidence. Meanwhile, the Talent Retention variable was measured through the indicators intention to stay, organizational commitment, job embeddedness, and employee loyalty.

Table 1. Variables and Measurement

Variable	Code	Indicator	Primary References
Talent Management	TM.1	Talent attraction	(Collings & Mellahi, 2009); (Cappelli, 2008)
	TM.2	Talent development	
	TM.3	Performance management	
	TM.4	Career development	
	TM.5	Succession planning	
	TM.6	Retention practices	
Career Adaptability	CA.1	Career concern	(Savickas & Porfeli, 2012)
	CA.2	Career control	
	CA.3	Career curiosity	
	CA.4	Career confidence	
Talent Retention	TR.1	Intention to stay	(Meyer & Allen, 1991); (Mitchell et al., 2001) (Hoye & Saks, 2008)
	TR.2	Organizational commitment	
	TR.3	Job embeddedness	
	TR.4	Employee loyalty	

Data analysis was conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method with the assistance of SmartPLS 4.0 software. The PLS-SEM method was chosen because it can test complex structural models, including mediating relationships, and does not impose strict requirements regarding the normal distribution of data. The analysis was conducted in two main stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model). The outer model was evaluated to test the validity and reliability of the constructs using outer loading values, Average Variance Extracted (AVE), Composite Reliability (CR), Cronbach's Alpha, and the Heterotrait-Monotrait Ratio (HTMT). Next, the inner model evaluation was conducted to determine the model's predictive ability using the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and path coefficients.

Hypothesis testing was performed using a bootstrapping procedure with 5,000 subsamples at a 5% significance level. The direct effects of Talent Management on Career Adaptability, Career Adaptability on Talent Retention, and Talent Management on Talent Retention were tested based on path coefficients and significance levels. Additionally, the mediating effect of Career Adaptability was tested using the specific indirect effect and a 95% confidence interval. A mediating effect was considered significant if the p-value was < 0.05 and the confidence interval did not include zero. Based on these analytical procedures, this study tests four main hypotheses, namely: (1) Talent Management has a positive effect on Career Adaptability, (2) Career Adaptability has a positive effect on Talent Retention, (3) Talent Management has a positive effect on Talent Retention, and (4) Career Adaptability mediates the relationship between Talent Management and Talent Retention among Generation Z employees at digital startups.

Findings and Discussion

Findings

An evaluation of the measurement model (outer model) was conducted to test the construct validity and reliability of the study. Convergent validity was evaluated using outer loading values and Average Variance Extracted (AVE), while discriminant validity was tested using the Heterotrait-Monotrait Ratio (HTMT). Construct reliability was evaluated using Composite Reliability and Cronbach's Alpha. The test results showed that all indicators had outer loading values above 0.70 and AVE values exceeding the minimum threshold of 0.50. In addition, all constructs had Composite Reliability and Cronbach's Alpha values above 0.70; thus, it can be concluded that the research instrument met the validity and reliability criteria recommended in PLS-SEM analysis.

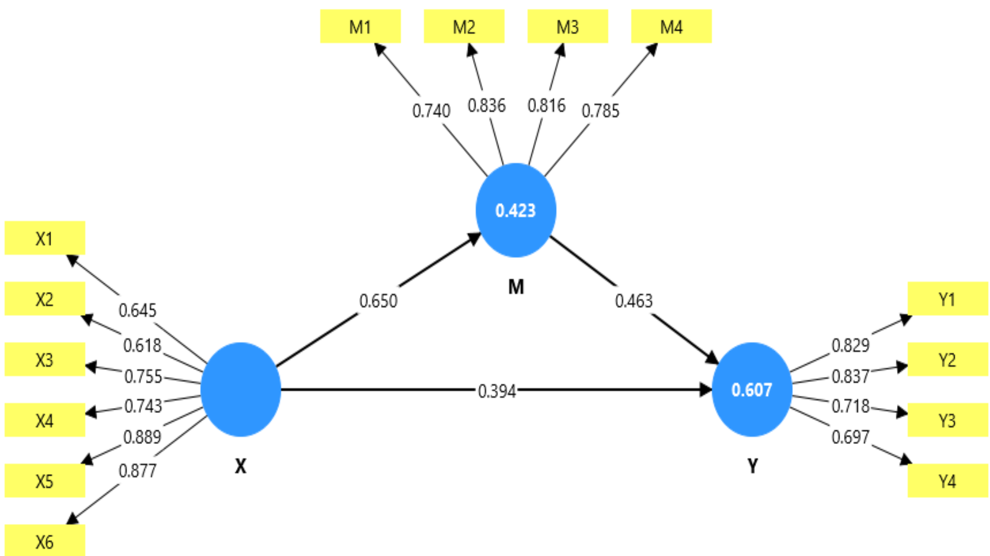

Figure 2. Research Model and Factor Loadings

Table 2. The Convergent Validity and Reliability

Variables	AVE	Cronbach's Alpha	Composite Reliability
Talent Management (X)	0.580	0.849	0.890
Career Adaptability (M)	0.632	0.805	0.873
Talent Retention (Y)	0.598	0.775	0.855

***Source:** Data analysis results from SmartPLS (2025).*

An evaluation of the measurement model (outer model) was conducted to ensure that all research constructs met the validity and reliability criteria recommended in PLS-SEM analysis. Convergent validity was evaluated using the Average Variance Extracted (AVE) value, while construct reliability was evaluated using Cronbach's Alpha and Composite Reliability. The test results showed that all constructs had AVE values above the minimum threshold of 0.50. The Talent Management variable had an AVE value of 0.580, Career Adaptability had an AVE value of 0.632, and Talent Retention had an AVE value of 0.598. These findings indicate that each construct explained more than 50% of the variance in the indicators that comprise it, thereby meeting the criteria for convergent validity.

In terms of reliability, the Cronbach's Alpha values for the variables Talent Management, Career Adaptability, and Talent Retention were 0.849, 0.805, and 0.775, respectively. All of these values are above the 0.70 threshold, indicating good internal consistency. Furthermore, the Composite Reliability values—0.890, 0.873, and 0.855, respectively—also exceeded the minimum threshold of 0.70. Thus, all research constructs are deemed reliable and suitable for use in structural equation modeling.

Table 3. Coefficient of Determination (R^2) Assessment

Variables	R Square	R Square Adjusted
Career Adaptability (M)	0.423	0.414
Talent Retention (Y)	0.607	0.595

***Source:** SmartPLS 4.0 Output (2025)*

Based on the results of the structural model evaluation in Table 3, the coefficient of determination (R^2) for the Career Adaptability variable was 0.423, with an Adjusted R^2 of 0.414. These results indicate that Talent Management explains 42.3% of the variation in Career Adaptability, while the remainder is influenced by other factors outside the research model. Furthermore, the Talent Retention variable has an R^2 value of 0.607 and an Adjusted R^2 of 0.595. These findings indicate that Talent Management and Career Adaptability together account for 60.7% of the variation in Talent Retention. Based on the criteria established by Hair et al. (2019), these R^2 values indicate that the model possesses moderate to strong predictive power in explaining the endogenous variable.

Table 4. Hypothesis Testing

Path	Hypothesis	Effect (β)	t-value	p-value	Results
Talent Management → Career Adaptability	H1	0.650	7.942	0.000	Positive and Significant
Career Adaptability → Talent Retention	H2	0.463	3.172	0.002	Positive and Significant
Talent Management → Talent Retention	H3	0.394	2.794	0.005	Positive and Significant
Talent Management → Career Adaptability → Talent Retention	H4	0.301	2.865	0.004	Positive and Significant (Mediation)

***Source:** SmartPLS 4.0 Output (2025)*

Hypothesis testing was conducted using the bootstrapping method in SmartPLS 4.0 to determine the significance of the relationships among variables in the research model. The test results showed that all proposed hypotheses were accepted because they had t-statistics greater than 1.96 and p-values less than 0.05. The results of the first hypothesis test (H1) indicate that Talent Management has a positive and significant effect on Career Adaptability, with a path coefficient (β) of 0.650, a t-statistic of 7.942, and a p-value of 0.000. These findings indicate that the better the talent management practices implemented by digital startups, the higher the career adaptability of Generation Z employees. Thus, the first hypothesis (H1) is accepted.

Furthermore, the results of the second hypothesis test (H2) show that Career Adaptability has a positive and significant effect on Talent Retention, with a path coefficient of 0.463, a t-statistic of 3.172, and a p-value of 0.002. These results indicate that employees with strong career adaptability tend to have a greater desire to remain with the organization. Therefore, the second hypothesis (H2) is also accepted.

Regarding the third hypothesis (H3), the analysis results show that Talent Management has a positive and significant effect on Talent Retention, with a path coefficient of 0.394, a t-statistic of 2.794, and a p-value of 0.005. These findings indicate that effective talent management practices can enhance employee loyalty and their desire to remain with the organization. Thus, the third hypothesis (H3) is accepted. Furthermore, the test of the fourth hypothesis (H4), which examines the mediating role of Career Adaptability, yielded significant results. The indirect effect coefficient was 0.301, with a t-statistic of 2.865 and a p-value of 0.004. These results indicate that Career Adaptability mediates the effect of Talent Management on Talent Retention. Since the direct effect of Talent Management on Talent Retention remains significant (H3 accepted) and the indirect effect via Career Adaptability is also significant, the mediating role can be categorized as partial mediation. Thus, the fourth hypothesis (H4) is accepted.

Overall, the research results show that Talent Management plays a strategic role in improving Talent Retention, both directly and by enhancing the Career Adaptability of Generation Z employees at digital startups in Makassar. These findings indicate that a company's success in managing talent not only impacts the improvement of employees' career adaptability but also contributes to the organization's success in retaining its talent. Furthermore, the largest path coefficient was found in the relationship between Talent Management and Career Adaptability ($\beta = 0.650$), indicating that talent management is the primary factor driving the development of career adaptability among Generation Z employees.

Discussion

The Impact of Talent Management on Career Adaptability

The research results show that Talent Management plays a crucial role in enhancing the Career Adaptability of Generation Z employees at digital startups in Makassar. These findings indicate that the more effective an organization's talent management practices are, the greater employees' ability to adapt to change, develop their competencies, and plan their career development. Talent Management practices—through competency development programs, training, mentoring, performance management, and career planning—provide organizational resources that help employees build the psychological readiness needed to cope with ever-changing job demands. This is particularly relevant in digital startups, which are characterized by dynamic work environments, high levels of innovation, and rapid technological change—all of which require employees with strong career adaptability.

These findings support the perspective of Career Construction Theory, which explains that career adaptability does not stem solely from an individual's personal characteristics but is also influenced by environmental support that enables individuals to build and develop their careers (Savickas & Porfeli, 2012). When organizations provide a talent management system that supports learning and development, employees gain the resources to enhance the dimensions of concern, control, curiosity, and confidence in facing their career futures. These research results align with Nalis et al. (2022), who explain that career adaptability is a psychological resource that helps individuals respond to job demands and engage in career crafting. Furthermore, Al Ariss and Sidani (2023) emphasize that modern talent management practices no longer focus solely on identifying high-performing individuals but also on the continuous development of talent. Thus, the findings of this study reinforce the hypothesis that Talent Management is a critical factor in building Generation Z employees' career adaptability in a rapidly changing work environment.

The Impact of Career Adaptability on Talent Retention

The research results show that Career Adaptability contributes to improved Talent Retention among Generation Z employees at digital startups in Makassar. These findings indicate that employees with higher career adaptability tend to be better prepared to handle changes in their work, understand career development opportunities, and build stronger ties to the organization. In the context of digital startups, adaptability is a critical aspect because employees frequently face role changes, emerging technologies, and demands for flexible work arrangements. Employees who view change as an opportunity for growth tend to have greater confidence in their future careers within the organization, thereby reducing their likelihood of leaving the company.

These findings support the research by Cai et al. (2023), which shows that career adaptability is related to job embeddedness—that is, individuals who can adapt to their work environment exhibit higher organizational commitment. Additionally, Li et al. (2023) explain that career adaptability enhances satisfaction with career decisions by increasing self-efficacy, thereby making individuals more confident in the career paths they have chosen. The findings of this study are also consistent with Kang et al. (2024), who state that career adaptability serves as a key mechanism in generating positive psychological outcomes, including well-being and career success. Therefore, an organization's ability to foster employees' career adaptability not only enhances individuals' capacity to cope with change but also serves as a critical strategy for retaining high-quality talent within a digital startup environment.

The Impact of Talent Management on Talent Retention

Research findings indicate that Talent Management influences Talent Retention, suggesting that effective talent management practices can increase Generation Z employees' desire to remain with the organization. These findings show that employees consider not only compensation when deciding whether to stay, but also opportunities for personal development, organizational support, career opportunities, and the quality of the work experience provided by the company. In digital startups, successfully retaining talent is becoming increasingly important because these organizations rely heavily on individuals with technological expertise, creativity, and the ability to innovate. Therefore, a talent management system that encompasses competency development, performance evaluation, and career planning serves as a strategic tool for fostering long-term relationships between employees and the organization.

These findings reinforce the research by Collings et al. (2022), which explains that strategic talent management is an organizational approach to acquiring, developing, and retaining individuals who make strategic contributions. The research results are also consistent with Chopra et al. (2024), who demonstrated that talent management practices combined with employer branding and employee engagement can strengthen employee retention. Furthermore, Sitaniapessy et al. (2023) found that the influence of talent management on retention is reinforced through organizational commitment as a psychological mechanism among employees. Thus, this study reinforces the view that talent retention is the result of organizational strategies capable of meeting professional development needs while simultaneously fostering employees' emotional attachment to the organization.

The Mediating Role of Career Adaptability in the Relationship Between Talent Management and Talent Retention

The research results indicate that Career Adaptability acts as a mediating variable in the relationship between Talent Management and Talent Retention. These findings suggest that the influence of talent management on employees' decisions to stay is not only direct but also occurs through a psychological process involving an increase in career adaptability. When organizations implement talent management practices that support learning, competency development, and career planning, employees become better prepared to face change and gain confidence in the sustainability of their careers within the organization. These conditions foster more positive work relationships and increase employees' tendency to remain with the organization.

These findings contribute theoretically by expanding the understanding that the relationship between human resource practices and talent retention is not explained solely by organizational factors but also through individual internal mechanisms. These findings support the Career Construction Theory approach, which views individuals as active agents in building their careers through the interaction between personal resources and environmental support. In line with Wang and

Li (2024), career adaptability is a psychosocial resource that enables individuals to cope with career changes constructively. Furthermore, Margheritti et al. (2024) demonstrate that career adaptability supports proactive behaviors such as job crafting, which helps individuals align their work with their career goals. Thus, this study suggests that digital startups seeking to improve Generation Z retention need not only to implement talent management practices but also to build employees' career adaptability as a sustainable human resources strategy.

Conclusion

This study aims to analyze the role of Talent Management in Career Adaptability and Talent Retention among Generation Z employees working at digital startups in Makassar. The study employs a quantitative approach with an explanatory research design using a cross-sectional survey method. Research data were collected from Generation Z employees who met the study criteria and analyzed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach to test both direct and indirect relationships among the variables. The results indicate that Talent Management contributes to enhancing employees' Career Adaptability, while Career Adaptability plays a role in strengthening Talent Retention. Furthermore, this study demonstrates that Career Adaptability serves as a mechanism explaining how Talent Management practices can influence Generation Z employees' decisions to remain with digital startup organizations.

This study offers theoretical and practical contributions to the development of human resource management research, particularly regarding the relationship between talent management practices, career adaptability, and employee retention in rapidly changing work environments. Theoretically, this study expands the understanding that the success of talent management is determined not only by an organization's ability to attract and develop talent but also through the individual psychological process of career adaptability. The study's primary contribution lies in the development of a model that positions career adaptability as a mediating variable in the relationship between talent management and talent retention within the context of digital startups. Practically, the research findings provide implications for digital startup managers in Makassar to strengthen talent management strategies by providing continuous training, mentoring programs, clear career development paths, constructive performance evaluation systems, and rewards that support employees' professional growth. Organizations also need to create a work environment that encourages continuous learning so that Generation Z employees have the ability to cope with change, enhance their career readiness, and build long-term commitment to the organization.

Although this study offers both academic and practical contributions, it has several limitations that should be noted. First, the study employed a cross-sectional design, meaning the data only describe the respondents' conditions at a specific point in time and cannot yet explain changes in career adaptability or employee retention behavior over the long term. Future research could use a longitudinal approach to observe the development of the relationship between talent management practices, career adaptation, and employees' decisions to stay over time. Second, this study is limited to Generation Z employees working at digital startups in Makassar; therefore, the findings cannot yet be broadly generalized to other industries, regions, or generational groups. Future research could expand the geographic scope, increase the sample size, or conduct intergenerational comparisons to gain a more comprehensive understanding. Furthermore, future research could consider additional variables such as perceived organizational support, employee engagement, psychological safety, digital competencies, and perceptions of AI-related job insecurity to enrich research models on talent retention strategies in the era of digital transformation.

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