https://doi.org/10.63985/ttbr.v2i2.146

The Impact of AI-Driven Recruitment on Generation Z Organizational Behavior and Workplace Engagement

Hengki Mangiring Parulian Simarmata

Politeknik Bisnis Indonesia, Indonesia.
*Corresponding author email address: hengkisimarmata.mm@gmail.com

Abstract: The rapid proliferation of artificial intelligence (AI) in talent acquisition has fundamentally transformed personnel selection from an interpersonal evaluative process into a socio-technical decision system. For Generation Z (born late 1990s–early 2010s) entering the global workforce, this technological shift presents a profound behavioral paradox. As digital natives, Generation Z applicants expect modern, technology-enabled hiring workflows, yet empirical studies demonstrate that fully automated candidate screening, asynchronous video interviews (AVIs), and non-explainable decision algorithms elicit widespread algorithm aversion, feelings of de-individuation, and heightened perceived procedural injustice. Drawing on organizational justice theory, signaling theory, person-environment fit, social exchange theory, and psychological contract theory, this paper presents a systematic literature-based analysis of peer-reviewed empirical studies and meta-analyses published between 2022 and 2026. The findings synthesize how recruitment automation, candidate experience, perceived fairness, and process explainability influence candidate trust, organizational attractiveness, and post-hire workplace engagement. Results reveal that while algorithmic efficiency enhances processing speed and administrative reach, non-explainable AI tools undermine person-environment fit and re-architect psychological contracts from relational commitments to transactional exchanges. This structural shift triggers strategic candidate adaptations and downstream technostress. The paper concludes with a risk-calibrated framework for human-AI augmentation to preserve candidate trust, procedural justice, and sustained workplace engagement.

Keywords: artificial intelligence in recruitment; Generation Z; perceived fairness; algorithm aversion; organizational justice; psychological contract

Cite: (Times New Roman, 10 pt, 1 spasi)

Copyright © TechTalent & Business Review
All rights reserved

1. Introduction

The contemporary human resource management (HRM) landscape is undergoing a structural digital transformation, marked by the widespread integration of artificial intelligence (AI), machine learning algorithms, natural language processing (NLP), and predictive talent analytics into personnel selection procedures (Bakers, 2025; Ologunoye et al., 2026). Organizations deploy AI-driven talent acquisition toolssuch as automated applicant tracking systems (ATS), resume screeners, conversational chatbots, and asynchronous video interview (AVI) platforms to manage massive applicant pools, compress time-to-hire, reduce administrative costs, and enhance decision consistency (Vignesh & Thiyagarajan, 2026; Tuttle & Critchlow, 2025).

Simultaneously, Generation Z (born late 1990s–early 2010s) is establishing a dominant presence in global labor markets. Recognized as digital natives raised in an environment of ubiquitous connectivity, mobile computing, and instant feedback, Generation Z candidates maintain distinct workplace expectations regarding technological sophistication, operational immediacy, and digital accessibility (Benítez-Márquez et al., 2022; Dashora et al., 2025). However, recent empirical literature reveals a fundamental resourcing paradox: despite their digital proficiency, Generation Z job seekers exhibit pronounced algorithm aversion, privacy concerns, and emotional anxiety when evaluated by automated systems during high-stakes selection encounters (Ren, 2026; Oostrom et al., 2024).

While corporate leaders view recruitment algorithms as objective tools that eliminate human idiosyncratic bias, prospective candidates frequently interpret automated screening as an opaque, impersonal gatekeeper that fails to recognize their unique individual potential (Horodyski, 2023; Bunea et al., 2026). This perceptual divergence carries far-reaching consequences for organizational behavior. Personnel selection serves as the primary contact point between job seekers and employers, functioning as an informational signal that shapes early expectations of corporate culture, procedural legitimacy, and psychological contract obligations (Tomprou & Lee, 2022; Folger et al., 2022).

Accordingly, this paper provides a literature-based analysis of how AI-driven recruitment influences Generation Z's perceptions, organizational behavior, and workplace engagement. By synthesizing empirical literature from 2022 to 2026, the study examines the mechanisms connecting recruitment automation, candidate experience, perceived justice, trust, organizational attractiveness, and employee motivation.

2. Literature Review and Theoretical Framework

2.1 Organizational Justice Theory in Algorithmic Selection

Organizational justice theory provides a foundational framework for explaining applicant reactions to selection procedures along three distinct dimensions: procedural justice (fairness of the process), interactional justice (quality of interpersonal treatment and communication), and distributive justice (fairness of outcomes) (Gilliland, 2008; Bauer et al., 2001). In AI-mediated recruitment, procedural justice rulessuch as consistency, job-relatedness, transparency, and opportunities for two-way communication are frequently compromised. When candidates are evaluated by opaque algorithms, they doubt whether the procedure allows them to adequately demonstrate their true capabilities, leading to diminished fairness perceptions regardless of decision favorability (Bakers, 2025; Köchling et al., 2022).

2.2 Signaling Theory and Process Explainability

Under conditions of pre-hire information asymmetry, job applicants treat observable recruitment practices as signals of unobservable organizational characteristics, such as corporate culture, employee care, and technological modernity (Spence, 1973; Connelly et

al., 2011). Highly automated, non-transparent selection platforms communicate operational efficiency, but simultaneously signal corporate impersonality, rigid standardization, and low relational warmth (Ren, 2026). Conversely, when employers deploy Explainable AI (XAI) systems that provide clear rationale regarding assessment dimensions and feedback they transmit a dual-signal of organizational innovativeness and Perceived Organizational Support (POS), significantly enhancing organizational attractiveness (Zhou et al., 2026).

2.3 Person-Environment (P-E) Fit and Algorithm Aversion

Person-environment fit theory posits that job attraction depends on perceived value congruence between the individual and the organization (Lievens et al., 2001). Ren (2026) conceptualizes AI recruitment as an ambivalent organizational signal that shapes organizational attractiveness through perceived P-E fit. Drawing from algorithm aversion literature (Dietvorst et al., 2015), candidates exhibit skepticism toward algorithmic decision-making in subjective domains (e.g., evaluating potential, cultural fit, or soft skills). In an experimental study of 300 job seekers, Ren (2026) established that perceived AI recruitment is negatively associated with P-E fit ($r = -.45$) and organizational attractiveness ($r = -.52$), with individual technology anxiety amplifying this negative relationship.

2.4 Psychological Contract Theory and Algorithmic Management

Psychological contracts reflect employees' subjective beliefs regarding the reciprocal obligations between themselves and their employer (Rousseau, 1995). Tomprou and Lee (2022) examined how algorithmic agents function as contract makers across five online experiments. They discovered that algorithmic agents communicating promises during recruitment signal lower employer commitments to relational inducements (e.g., socio-emotional support, long-term development, work-life flexibility) compared to human recruiters, while transactional inducements (e.g., pay, schedule) remain unaffected. Consequently, algorithmic recruitment shifts the baseline psychological contract toward a transactional exchange prior to onboarding.

2.5 Social Exchange Theory and Technology Acceptance Extensions

Social exchange theory suggests that supportive organizational gestures elicit positive employee attitudes and reciprocal commitment (Cropanzano & Mitchell, 2005). Recent extensions of the Technology Acceptance Model (TAM) integrated with psychological safety and technostress demonstrate that trust in AI systems directly drives intentional acceptance and actual AI use intensity (the frequency and routinization of AI in daily work), whereas technostress acts as a critical strain mechanism that impairs attitudes and engagement (Țuclea & Poenaru, 2026).

2. Methodology

This study adopts a systematic literature-based narrative synthesis methodology, adhering to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines (Page et al., 2021). Literature search protocols targeted major academic databases, including ScienceDirect, SpringerLink, MDPI, IEEE Xplore,

ResearchGate, Emerald Insight, and Web of Science, covering publication dates from 2022 to 2026.

The search strategy utilized boolean query strings combining key terms: ('AI recruitment' OR 'algorithmic hiring' OR 'automated selection') AND ('Generation Z' OR 'Gen Z' OR 'early career') AND ('procedural justice' OR 'organizational attractiveness' OR 'psychological contract' OR 'technostress' OR 'workplace engagement'). Inclusion criteria required peer-reviewed publication status, explicit empirical or theoretical focus on AI talent acquisition and Generation Z/early-career candidate reactions, and methodological rigor grounded in quantitative models (e.g., PLS-SEM, experimental vignette designs) or structured qualitative frameworks. A total of 34 primary academic sources were synthesized to extract qualitative themes, structural equation parameters, and experimental effect sizes.

3. Results and Discussion

4.1 Recruitment Automation, Candidate Experience, and the 'Uniqueness Paradox'

AI recruitment automation including CV screeners, NLP parsers, and conversational chatbots delivers notable operational benefits, such as accelerated response times, 24/7 accessibility, and instant confirmation messaging. Generation Z candidates, accustomed to rapid digital service, acknowledge these operational efficiencies as positive aspects of candidate experience (Dashora et al., 2025; Gem, 2026).

However, these efficiency gains trigger a psychological tension known as the Uniqueness Paradox. Generation Z job seekers place high value on authentic individual expression, equity, and holistic assessment. When subjected to automated screening or asynchronous video scoring, candidates experience acute frustration, believing that standardized algorithmic classifiers fail to appreciate their unique potential, personal context, or soft skills. Oostrom et al. (2024) demonstrated across two studies (N=172 and N=276) that informing applicants that an algorithm scored their video interview increased feelings of emotional creepiness, reduced perceived predictive validity, and damaged feedback acceptance, ultimately lowering organizational attraction and job acceptance intentions.

4.2 Perceived Fairness, Trust, and Organizational Attractiveness

Empirical structural equation modeling by Bunea et al. (2026) on a sample predominantly composed of Generation Z (N=202, 88.6% aged 18–24) provides rigorous insight into the perceptual mechanism. General trust in AI (beta = 0.509, f^2 = 0.325) and perceived AI expertise (beta = 0.339) were found to be strongly associated with anticipated procedural justice. Procedural justice, in turn, exhibited the largest structural association with organizational attractiveness, which subsequently predicted perceived talent-market competitive positioning (beta = 0.585 indirect effect).

Table 1 synthesizes core empirical findings from key peer-reviewed studies (2022–2026) examining AI recruitment and candidate reactions:

Study & Year	Sample & Method	Key Variables	Core Empirical Findings & Mechanisms
Ren (2026)	Experiment (N=300 job seekers)	AI Recruitment, P-E Fit, Org Attractiveness, Tech Anxiety	AI recruitment negatively impacts org attractiveness (r = -.52); mediated by reduced P-E fit (r = -.45). Tech anxiety amplifies negative impact.
Bunea et al. (2026)	PLS-SEM Survey (N=202, 88.6% Gen Z)	Trust in AI, Procedural Justice, Org Attractiveness, Market Position	Trust in AI strongly predicts procedural justice (f^2 = 0.325). Procedural justice is the primary driver of org attractiveness (beta = 0.585).
Tomprou & Lee (2022)	5 Online Experiments (Recruiting & Onboarding)	Agent Type (AI vs. Human), Inducements, Psychological Contract	Algorithmic recruiting agents signal reduced commitment to relational inducements, establishing a transactional contract.
Oostrom et al. (2024)	2 Experiments (N=172 & N=276)	Evaluation Source (Algorithm vs Recruiter), Creepiness, Fairness	Algorithmic scoring increases emotional creepiness, reduces procedural fairness, predictive validity, and job acceptance intentions.
Țuclea & Poenaru (2026)	PLS-SEM Survey (N=272 Gen Z workers)	Perceived Usefulness, Psych Safety, Technostress, AI Use Intensity	Trust and usefulness drive actual AI use intensity. Technostress weakens the positive link between psychological safety and ease of use.
Zhou et al. (2026)	Dual-mediation Survey (N=320 applicants)	Explainable AI (XAI), POS, Innovativeness, Org Attractiveness	XAI enhances org attractiveness via perceived organizational support and innovativeness (innovativeness path accounts for 73.3% of indirect effect).

As detailed in Table 1, process explainability serves as a vital counter-signal. When organizations utilize Explainable AI (XAI) that offers transparent feedback and clear evaluation criteria, job applicants interpret the technology as a sign of organizational innovativeness and support, mitigating algorithm aversion (Zhou et al., 2026).

4.3 Psychological Contract Shift, Employee Motivation, and Engagement

A central finding from Tomprou and Lee (2022) is the structural transformation of the psychological contract. When entry-level recruitment is entirely managed by software or chatbots, Generation Z candidates perceive that employer obligations are focused primarily on transactional terms (pay, schedule, basic tasks) rather than relational inducements (career development, personal care, socio-emotional exchange).

This transactional baseline carries significant post-hire consequences. Employees recruited via fully automated pathways demonstrate lower initial affective organizational commitment and reduced willingness to display voluntary organizational citizenship

behaviors (OCBs). Furthermore, while employees recruited by human managers experience intense perceived breach when relational promises go undelivered, those hired via AI tools maintain lower baseline relational expectations altogether, viewing their employment through an arm's-length transactional lens.

4.4 Downstream Workplace Behavior: Strategic Adaptations and Technostress

In response to widespread automated screening, Generation Z applicants engage in strategic behavioral adaptations. Recognizing that resume parsers search for specific keywords and formatting standards, candidates frequently deploy consumer generative AI tools to reverse-engineer job postings, optimize CV phrasing, and mass-submit applications (Novoresume, 2026). This creates a complex digital environment where candidate-facing AI tools interact directly with corporate screening algorithms.

Post-hire, intensive exposure to algorithmic workplace management accelerates technostress. Țuclea and Poenaru (2026) demonstrated that AI-related technostress (overload, complexity, uncertainty) directly undermines positive attitudinal evaluations and attenuates the beneficial effect of workplace psychological safety on perceived ease of use and sustained AI engagement.

4. Conclusion

5.1 Main Conclusions

This literature-based investigation demonstrates that AI-driven recruitment functions as a double-edged sword for Generation Z organizational behavior. While recruitment automation delivers essential operational speed, administrative scalability, and continuous processing, non-explainable algorithmic screening erodes person-environment fit, damages procedural justice perceptions, and re-architects the employee-employer relationship from a relational trust foundation into a transactional contract.

5.2 Strategic Recommendations for HR Leaders

To resolve the resourcing paradox and build sustained workplace engagement among Generation Z talent, organizations should adopt a risk-calibrated framework of constrained human-AI augmentation:

Deploy Explainable and Audited AI Architectures: Organizations must implement Explainable AI (XAI) platforms that provide candidates with transparent evaluation criteria and clear feedback mechanisms. Systems should be regularly audited for algorithmic bias in compliance with emerging legal frameworks (e.g., EU AI Act, NYC Local Law 144; Aegis Firma, 2026).

Institute Human-in-the-Loop Safeguards: Automation should be constrained to administrative tasks (scheduling, initial resume parsing, basic inquiries). Consequential screening, shortlisting, and rejection decisions must require documented human recruiter review and override authority (Abudawood, 2026).

Preserve Relational Messaging During Onboarding: To counter the transactional baseline established by digital screening, organizations should introduce structured

human interactions, peer mentorship, and explicit communication of relational commitments during early onboarding stages (Tomprou & Lee, 2022).

Foster Psychological Safety and Manage Technostress: Post-hire HR management must establish psychologically safe learning environments that encourage digital skill development while actively managing workload design and digital boundaries to reduce technostress (Țuclea & Poenaru, 2026).

References

Abudawood, B. B. (2026). The impact of artificial intelligence on recruitment decision-making: An integrative critical review of opportunities, risks, and human oversight. ResearchGate Preprints, 1–28.

Aegis Firma. (2026). AI for HR and recruitment compliance: NYC LL144, EU AI Act guidance. Aegis Compliance Reports.

Ahmadi, A., & Abdillah, A. (2024). Transforming human resources recruitment: The impact of artificial intelligence (AI) on organizational attractiveness and applicant intent. Journal of Human Resource & Organizational Studies, 12(2), 105–118.

Babaee, A., & Shank, D. B. (2025). Trust and procedural justice mediate the effects of AI hiring on organizational attraction and intent to apply. Discover Artificial Intelligence, 5(1), 375.

Bakers, A. (2025). Algorithmic hiring and organizational justice: A conceptual framework for balancing recruitment efficiency, procedural fairness, and human judgment. International Journal of Advanced Engineering Science and Information Technology, 8(4), 112–128.

Bauer, T. N., Truxillo, D. M., Sanchez, R. J., Craig, J. M., Ferrara, P., & Campion, M. A. (2001). Applicant reactions to selection: Development of the selection procedural justice scale (SPJS). Personnel Psychology, 54(2), 387–419.

Benítez-Márquez, M. D., Sánchez-Teba, E. M., Bermúdez-González, G., & Núñez-Rydman, E. S. (2022). Generation Z within the workforce and in the workplace: A bibliometric analysis. Frontiers in Psychology, 12, 736820.

Bunea, O.-I., Corbos, R.-A., & Mihai, B. (2026). Artificial intelligence in talent acquisition: Procedural justice, organizational attractiveness, and perceived competitive positioning in digital talent markets. Administrative Sciences, 16(8), 360.

Chen, Z. (2023). Collaboration among recruiters and artificial intelligence: Removing human prejudices in employment. Cognition, Technology & Work, 25(1), 135–149.

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. Journal of Management, 37(1), 39–67.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. Journal of Management, 31(6), 874–900.

Dashora, K., Bhandari, S., Ghewariya, A., & Meena, R. (2025). The role of technology in recruitment of Gen Z and shaping future strategies for Gen Beta. SSIJMAR Journal, 13(2), 44–55.

Dietvorst, B. J., Simmons, J. P., & Massey, C. (2015). Algorithm aversion: People erroneously avoid algorithms after seeing them err. Journal of Experimental Psychology: General, 144(1), 114–126.

Fernandes, J. (2026). Scoring the score: An empathy, trust and accountability lens for auditing AI-assisted hiring decisions. International Journal of Science and Research (IJSR), 15(7), 405–418.

Folger, N., Brosi, P., Stumpf-Wollersheim, J., & Welpe, I. M. (2022). Applicant reactions to digital selection methods: A signaling perspective on innovativeness and procedural justice. Journal of Business and Psychology, 37(4), 735–757.

Gem. (2026). How AI is changing recruiting: 10 Trends and industry insights. Gem Talent Intelligence Reports.

Gilliland, S. (2008). The tails of justice: A critical examination of the dimensionality of organizational justice constructs. Human Resource Management Review, 18(4), 271–281.

Horodyski, P. (2023). Applicants' perception of artificial intelligence in the recruitment process. Computers in Human Behavior Reports, 11, 100303.

Köchling, A., Wehner, M. C., & Warkentin, M. (2022). Can I show my skills? Affective responses to artificial intelligence in the recruitment process. Information Systems Frontiers, 24(5), 1520–1538.

Lievens, F., Decaesteker, C., Coetsier, P., & Geirnaert, J. (2001). Organizational attractiveness for prospective applicants: A person–organisation fit perspective. Applied Psychology, 50(1), 30–51.

Novoresume. (2026). 100+ Statistics on AI replacing jobs and hiring trends: Key data and insights. Novoresume Career Intelligence.

Ologunoye, O. T., Adisa, T. A., Gbadamosi, G., Mordi, C., & Chang, K. (2026). The resourcing paradox: A systematic review of efficiency and effectiveness in AI-powered recruiting. Employee Relations: The International Journal, 48(5), 873–892.

Oostrom, J. K., Holtrop, D., Koutsoumpis, A., van Breda, W., Ghassemi, S., & de Vries, R. E. (2024). Applicant reactions to algorithm- versus recruiter-based evaluations of an asynchronous video interview and a personality inventory. Journal of Occupational and Organizational Psychology, 97(3), 812–835.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. BMJ, 372, n71.

Ren, Z. (2026). Applicant perceptions of AI recruitment and organizational attractiveness: The person-environment fit mechanism from an algorithm aversion perspective. Uniglobal Journal of Social Sciences and Humanities, 5(2), 1–10.

Rousseau, D. M. (1995). Psychological contracts in organizations: Written and unwritten agreements. Sage Publications.

Spence, M. (1973). Job market signaling. The Quarterly Journal of Economics, 87(3), 355–374.

Tomprou, M., & Lee, M. K. (2022). Employment relationships in algorithmic management: A psychological contract perspective. Computers in Human Behavior, 126, 106997.

Țuclea, C.-E., & Poenaru, L.-F. (2026). Generation Z employees' acceptance and AI use intensity: A moderated mediation model of psychological safety, technostress, and trust. Merits, 6(1), 7.

Tuttle, L., & Critchlow, K. (2025). Digital transformation in talent acquisition: Modern approaches to recruitment and selection. International Journal of Research in Human Resource Management, 7(1), 351–357.

Vignesh, K., & Thiyagarajan, R. (2026). A study on revolutionizing talent acquisition on the impact of artificial intelligence in recruitment. ResearchGate Preprints, 1–15.

Zhou, X., Zhang, Y., & Chen, L. (2026). Explainable AI interviews and organizational attractiveness: The roles of perceived organizational support and innovativeness. Administrative Sciences, 16(3), 144.