

Job Enrichment Model Development Human-Centered Design in Reducing Job Hopping Intention of Generation Z Employees in North Sumatra

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Abstract


The phenomenon of job hopping intention among Generation Z employees has become a serious challenge for organizations, particularly in North Sumatra, which is experiencing economic growth. This study aims to develop a Human-Centered Design (HCD)-based job enrichment model to reduce job hopping intention among Generation Z employees. This study employs a mixed-methods approach with a sequential exploratory design. The qualitative phase was conducted through in-depth interviews and Focus Group Discussions (FGDs) to explore the work needs, preferences, and perceptions of Generation Z toward their jobs. The qualitative findings were used to formulate contextually relevant dimensions of HCD-based job enrichment.

The quantitative phase involved a survey of 150 Generation Z employees across various service, manufacturing, and banking companies in North Sumatra. The sampling technique used was purposive sampling. Data analysis was conducted using Structural Equation Modeling (SEM-PLS) with SmartPLS.

The results indicate that HCD-based job enrichment has a positive and significant effect on work engagement and job satisfaction, and a significant negative effect on job hopping intention. Work engagement and job satisfaction were found to partially mediate the relationship between job enrichment and job hopping intention. This study produces a conceptual and practical model for the development of HCD-based job enrichment that can be implemented by organizations to reduce job hopping intention among Generation Z employees in North Sumatra.

Keywords: *Job enrichment; Human-centered design; Job hopping intention; Work engagement; Job satisfaction.*

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INTRODUCTION

Generation Z, generally born between 1997 and 2012, is beginning to dominate the workforce across various industrial sectors. Generation Z's adaptable nature, along with their tendency to seek meaning, flexibility, and self-development in their work, has led to a relatively high rate of job mobility compared to previous generations. One impact is an increase in *job-hopping intention*, the tendency to change jobs within a relatively short period of time.

In North Sumatra, particularly in cities like Medan, Binjai, and Deli Serdang, the turnover trend of young employees is increasingly evident in the service, modern retail, manufacturing, and banking sectors. High job-hopping intentions lead to increased

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recruitment and training costs, decreased organizational knowledge continuity, and disrupted team stability. Various studies link *job-hopping intentions* to factors such as job satisfaction, organizational commitment, work engagement, and perceptions of organizational support.

There are many ways that organizations/companies can reduce the high level of *job hopping intention*, namely by developing a *job enrichment model*. *Job enrichment* is a classic approach to job design that focuses on improving job quality through task variety, autonomy, feedback, task significance, and development opportunities. However, most *job enrichment practices* are still *top-down* and do not fully consider the unique needs, preferences, and contexts of Generation Z. According to Robbins & Judge (2020), *job enrichment* is the process of enriching jobs by adding more challenging tasks, providing greater autonomy, and increasing employee responsibility, so that work becomes more meaningful and intrinsically motivating.

To produce a *job enrichment model* that maximizes *job hopping intention*, *integration with Human-Centered Design (HCD)* is needed. *Human-Centered Design (HCD)* offers a more participatory and empathetic perspective in designing jobs. HCD emphasizes a deep understanding of user experiences, needs, and aspirations through the stages of *empathize, define, ideate, prototype, and test*. By incorporating HCD principles in *job enrichment development*, it is hoped that the resulting job design will be more relevant, meaningful, and able to suppress *job hopping intention*. According to ISO 9241-210:2019 *Human-centered design* is an interactive system design approach that aims to create a system that can be used well, by focusing on users, tasks, and environments, involving users in the entire design and evaluation process.

Furthermore, according to (Nguyen et al., 2022), *Human-Centered Design* is a set of design principles, methods, and tools, as well as a philosophy that enables design practitioners to co-create value propositions with people (or stakeholders) throughout the design lifecycle. In the context of work systems, HCD is the foundation for creating ergonomic work environments that support worker well-being. The application of HCD has shown positive results in various integration sectors. For example, in the integration sector with human-machine systems, the feasibility and advantages of the proposed approach compared to existing simulation software are demonstrated in quickly generating and assessing alternative scenarios and finding a balance between ego quality levels and system performance (Keshvarparast et al., 2024).

In line with the development of the world of work and the development of increasingly advanced human thought patterns, collaboration is needed to further develop a *job enrichment model* based on *human-centered design* to suppress *job hopping*, especially among generation z in the North Sumatra region, currently generation z has begun to dominate the scope of the world of work.

Recent research shows that the phenomenon of *job hopping* is not simply a matter of career mobility, but is closely related to job design, job satisfaction, work engagement, and the alignment of work values among younger generations. Studies across various contexts have found that *job hopping Intention* among Generation Z and Millennials is influenced by a lack of career development opportunities, low autonomy, and a mismatch between work expectations and organizational practices (Zahari & Puteh, 2023; Ivanovic & Ivancevic, 2019; Nguyen & Le, 2022). Other studies confirm that psychological factors such as *job satisfaction*, *work engagement*, and *career adaptability* play a significant role in suppressing the tendency to change jobs (Shakya et al., 2025; Ardani et al., 2024; Prihaningrum & Purba, 2021). Furthermore, recent systematic reviews indicate that *job hopping drivers* are multidimensional, encompassing individual, job, and organizational factors, thus requiring a more comprehensive and contextual approach to job design (Apriliani et al., 2025). These findings suggest that solutions to *job hopping* cannot simply rely on conventional HR policies but need to address the core of job design itself.

Although numerous studies have linked *job enrichment* to increased motivation, job satisfaction, and performance (Umstot et al., 1976; Kivimäki et al., 1995; Marta et al., 2021),

most *job enrichment models* remain *top-down* and fail to fully accommodate the characteristics, preferences, and psychological needs of Generation Z, who place greater demands on meaningful work, flexibility, and participation. Meanwhile, literature on *Human-Centered Design* (HCD) emphasizes the importance of a participatory, empathetic, and iterative approach to designing work systems that prioritize human well-being. However, its application in the context of job design, particularly to reduce *job hopping*, remains limited and fragmented. While some studies demonstrate the potential of HCD to improve work system quality and employee experience, few studies explicitly integrate HCD principles into *job enrichment models* to address *job hopping intentions* among Generation Z, particularly in a regional context such as North Sumatra. This gap is the basis of the urgency of this research, namely to develop a *Human-Centered Design- based job enrichment model* as an integrated approach that not only enriches jobs structurally, but also aligns with the needs and work values of Generation Z in order to suppress *job hopping intention* more effectively and sustainably.

This study aims to provide a comprehensive understanding of relevant job design for Generation Z employees in North Sumatra by first identifying in depth their needs, preferences, and work experiences in the context of the organizational environment and the characteristics of the jobs they undertake. Based on this understanding, this study then develops a *human-centered design- based job enrichment model* that is designed in a participatory, contextual manner, and in line with the values, work styles, and expectations of Generation Z, so that it is able to answer the challenges of designing more meaningful and adaptive jobs. In addition, this study also empirically analyzes the effect of implementing *human-centered design- based job enrichment* on *work engagement* and *job satisfaction*, as well as the role of these two variables as mediators in suppressing job hopping intention in Generation Z employees, in order to produce a model that is not only conceptual but also quantitatively tested and applicable to human resource management practices.

RESEARCH DESIGN AND METHODOLOGY

This study uses a *mixed methods approach* with an exploratory *sequential design* because developing a *human-centered design- based job enrichment model* requires a deep qualitative understanding as the basis for formulating quantitative instruments and models. This approach begins with a qualitative phase to explore the needs, perceptions, and work experiences of Generation Z employees, which then serve as the conceptual foundation for developing the research constructs. Next, the quantitative phase is carried out to empirically test and validate the developed model, resulting in findings that are not only contextual but also measurable and scientifically generalizable.

In the qualitative stage, data were collected through in-depth semi-structured interviews with 20 Generation Z employees and 10 HR practitioners, as well as through two *focus group discussions* involving 10–15 participants per session. This stage focused on exploring Generation Z's perceptions of ideal jobs, identifying job factors that trigger or suppress *job hopping intentions*, and formulating *job enrichment elements* considered relevant and important to them. The data obtained were analyzed using thematic analysis through open, axial, and selective coding processes to form main themes which were then formulated as dimensions of *job enrichment* based on *human-centered design*.

The quantitative stage was conducted through a survey of 150 Generation Z employees selected using *purposive sampling techniques* in Medan City, Binjai, and Deli Serdang Regency, covering the service, manufacturing, and banking sectors. The conceptual model resulting from the qualitative stage was operationalized into latent constructs measured using a 1–5 Likert scale questionnaire, including variables of *job enrichment* based on *human-centered design*, *work engagement*, *job satisfaction*, and *job hopping intention*. Data analysis was conducted using Structural Equation Modeling based on *Partial Least Squares* with the help of SmartPLS

to test the relationship between variables and the mediating role of work engagement and job satisfaction in suppressing job hopping intention.

RESULTS AND DISCUSSION

Qualitative Stage Results

Thematic analysis of interview and focus group discussion data yielded several key themes reflecting Generation Z's needs, preferences, and expectations regarding job design. Findings indicate that Generation Z places a strong emphasis on task variety that is not only technically challenging but also meaningful and contributes significantly to organizational goals and their personal development. Furthermore, they desire a sufficient level of autonomy in managing work methods, making operational decisions, and prioritizing tasks, as this provides a sense of trust, control, and responsibility for their work.

Another prominent theme was the need for regular, clear, and two-way feedback, where employees not only receive evaluations from their superiors but also have the space to express their views, challenges, and aspirations. Generation Z also expressed a strong desire for career development paths and tangible learning opportunities, whether through formal training, mentoring, or on-the-job experiences that broaden their skills. Furthermore, work flexibility in terms of work hours, work methods, and work environment is a significant factor influencing their satisfaction and engagement with the organization.

Overall, these findings indicate that Generation Z expects a more participatory, adaptive, and human-centered job design, rather than simply being based on organizational needs. Therefore, all identified themes were then synthesized and formulated into dimensions of Job Enrichment Based on Human-Centered Design (JE-HCD), which include meaningful task variety, autonomy, two-way feedback, development opportunities, participation in decision-making, and work flexibility. These dimensions then serve as the conceptual basis for developing the research model and measurement instruments in the quantitative stage.

Quantitative Stage Results

Based on the data analysis carried out, the results obtained in this study are as follows:

Table 1. Brief Description of Respondents

| Characteristics | Category | Frequency | Percentage |
|------------------|-----------------|-----------|------------|
| Gender | Man | 30 | 30.0 |
| | Woman | 105 | 70.0 |
| Age | 18-22 years | 31 | 20.7 |
| | 23-26 years | 85 | 56.7 |
| | 27-29 years old | 34 | 22.6 |
| Years of service | 6-12 months | 63 | 42.0 |
| | 13-24 months | 75 | 50.0 |
| | > 24 months | 12 | 8.0 |
| Corporate Sector | Service | 83 | 55.3 |

| | | |
|---------------|----|------|
| Manufacturing | 45 | 30.0 |
| Banking | 22 | 14.7 |

Source: Processed data (2026)

Based on the characteristics of the respondents, the majority of research participants were female with a proportion of 70.0 percent compared to males at 30.0 percent, indicating the dominance of female involvement in the sample. In terms of age, most respondents were in the 23–26 years range at 56.7 percent, followed by the 18–22 years age group at 20.7 percent and 27–29 years at 22.6 percent, reflecting the main representation of early to middle Generation Z in the workforce. In terms of work period, most respondents were in the 13–24 months range at 50.0 percent, followed by 6–12 months at 42.0 percent, while those with work periods of more than 24 months were only 8.0 percent, indicating the dominance of employees with relatively early work experience. Meanwhile, based on the company sector, most respondents worked in the service sector at 55.3 percent, followed by the manufacturing sector at 30.0 percent, and the banking sector at 14.7 percent, which shows the representation of various main sectors in North Sumatra.

Descriptive Statistics Results

Table 2. Descriptive Statistics of Research Variables

| Variables | Number of Items | Mean | Elementary School | Min–Max Range |
|--|-----------------|------|-------------------|---------------|
| <i>HCD Based Job Enrichment (JE-HCD)</i> | 18 | 3.82 | 0.56 | 2.30–4.85 |
| <i>Work Engagement (WE)</i> | 9 | 3.75 | 0.60 | 2.10–4.90 |
| <i>Job Satisfaction (JS)</i> | 8 | 3.68 | 0.58 | 2.00–4.85 |
| <i>Job Hopping Intention (JHI)</i> | 6 | 2.41 | 0.72 | 1.00–4.50 |

Source: Processed data (2026)

Based on descriptive statistics, the HCD-Based *Job Enrichment* (JE-HCD) variable has an average value of 3.82 with a standard deviation of 0.56 and a score range of 2.30–4.85, indicating that respondents tend to rate the implementation of HCD-based *job enrichment* at a moderate to high level. *The Work Engagement* (WE) variable shows an average value of 3.75 with a standard deviation of 0.60 and a range of 2.10–4.90, indicating that in general Generation Z employees have a relatively good level of work engagement. Meanwhile, *Job Satisfaction* (JS) has an average of 3.68 with a standard deviation of 0.58 and a range of 2.00–4.85, reflecting a fairly positive level of job satisfaction although there is still variation between respondents. In contrast, the *Job Hopping Intention* (JHI) variable has the lowest average value, namely 2.41 with a standard deviation of 0.72 and a range of 1.00–4.50, which indicates that the tendency to have the intention to change jobs is relatively low to moderate among the study respondents.

Reliability and Validity Test Results

Table 3. Reliability and Validity Test

| Variables | Cronbach's Alpha | Composite Reliability | AVE |
|-----------|------------------|-----------------------|-----|
|-----------|------------------|-----------------------|-----|

| | | | |
|--------|-------|-------|-------|
| JE-HCD | 0.901 | 0.923 | 0.567 |
| WE | 0.887 | 0.915 | 0.583 |
| JS | 0.873 | 0.904 | 0.560 |
| JHI | 0.854 | 0.892 | 0.579 |

Source: Processed data (2026)

The results of the reliability and validity tests indicate that all research variables meet the measurement feasibility criteria. *The Cronbach's Alpha values* for the JE-HCD (0.901), WE (0.887), JS (0.873), and JHI (0.854) were all above the threshold of 0.70, indicating good internal consistency of the instrument. Similarly, the Composite Reliability values for the JE-HCD (0.923), WE (0.915), JS (0.904), and JHI (0.892) also exceeded the minimum standard of 0.70, thus strengthening the evidence of construct reliability. In addition, the *Average Variance Extracted* (AVE) value of each variable JE-HCD (0.567), WE (0.583), JS (0.560), and JHI (0.579) is greater than 0.50, which indicates that the indicators in each construct are able to explain latent variance adequately and meet the convergent validity criteria.

Hypothesis Test Results

Table 4. Hypothesis Test Results (SEM-PLS Path Coefficient)

| Relationship between variables | Path Coefficient (β) | t-statistic | p-value | Information |
|--------------------------------|----------------------|-------------|---------|------------------------|
| JE-HCD → WE | 0.58 | 9.21 | 0,000 | Significant |
| JE-HCD → JS | 0.49 | 7.84 | 0,000 | Significant |
| JE-HCD → JHI | -0.27 | 3.98 | 0,000 | Significant (negative) |
| WE → JHI | -0.31 | 4.67 | 0,000 | Significant (negative) |
| JS → JHI | -0.24 | 3.52 | 0.001 | Significant (negative) |

Source: Processed data (2026)

Based on the results of the SEM-PLS hypothesis test, all relationships between the variables tested showed a statistically significant effect. HCD -based Job Enrichment has a positive and significant effect on Work Engagement with a path coefficient of 0.58 (t = 9.21; p = 0.000), and a significant positive effect on Job Satisfaction with a coefficient of 0.49 (t = 7.84; p = 0.000), which indicates that the higher the implementation of JE-HCD, the higher the engagement and job satisfaction of Generation Z employees. In addition, JE-HCD also has a significant negative effect on Job Hopping Intention with a coefficient of -0.27 (t = 3.98; p = 0.000), indicating that increasing JE-HCD can reduce the tendency of job turnover intentions. Furthermore, Work Engagement has a significant negative effect on Job Hopping Intention with a coefficient of -0.31 (t = 4.67; p = 0.000), likewise Job Satisfaction has a significant negative effect on Job Hopping Intention with a coefficient of -0.24 (t = 3.52; p = 0.001), which confirms that the higher the engagement and job satisfaction, the lower the employee's intention to do job hopping.

Indirect Influence Results

Table 5. Effect of Mediation

| Mediation Path | Indirect Effect (β) | t-statistic | p-value | Information |
|----------------|---------------------|-------------|---------|-------------|
|----------------|---------------------|-------------|---------|-------------|

| | | | | |
|-------------------|-------|------|-------|---------------------------------|
| JE-HCD → WE → JHI | -0.18 | 4.12 | 0,000 | Significant (partial mediation) |
| JE-HCD → JS → JHI | -0.12 | 3.45 | 0.001 | Significant (partial mediation) |

Source: Processed data (2026)

The results of the mediation test using the SEM-PLS *bootstrapping method* indicate that *work engagement* and *job satisfaction* act as partial mediators in the relationship between HCD-based *job enrichment* and *job hopping intention*. The mediation path JE-HCD → WE → JHI produces an *indirect effect value* of -0.18 with a *t-statistic* of 4.12 and a *p-value* of 0.000, indicating that increasing HCD-based job enrichment decreases *job hopping intention* indirectly through increasing *work engagement*. Similarly, the path JE-HCD → JS → JHI shows an *indirect effect* of -0.12 with a *t-statistic* of 3.45 and a *p-value* of 0.001, confirming that job satisfaction also significantly mediates the effect of HCD-based job enrichment on *job hopping intention*. These findings confirm that although JE-HCD has a direct effect on decreasing *job hopping intention*, some of the influence also occurs indirectly through increasing engagement and satisfaction.

The results of this study indicate that human-centered design (JE-HCD)-based *job enrichment* has a significant positive effect on *work engagement* and *job satisfaction*, and a significant negative effect on *job hopping intention* in Generation Z employees in North Sumatra. This finding strengthens the basic assumption of the *Job Characteristics Model* which emphasizes that job design that enriches task variety, autonomy, and feedback can increase intrinsic motivation and employee work engagement (Ivancevich et al., 2018; Kivimäki et al., 1995). This result is also in line with the study by Gillet et al. (2023) which found that job characteristics such as skill variety, task significance, and autonomy contribute to increased work engagement and decreased *turnover intention*. In the context of Generation Z, this finding is increasingly relevant considering that this generation tends to seek meaning, flexibility, and space for growth in their work (Chand et al., 2026; Zahari & Puteh, 2023).

The positive influence of JE-HCD on *work engagement* can be explained through a *human-centered design approach* that places employees at the center of job design. By involving employees in the work design process, organizations are able to create jobs that better align with the psychological needs, preferences, and work values of Generation Z (Preece et al., 2019; ISO, 2019). This finding supports research by Lestari and Nugroho (2023) which shows that the match between psychological needs and job characteristics plays a significant role in increasing work engagement. Furthermore, the integration of HCD principles into *job enrichment* also aligns with a *human-centric management approach* that emphasizes the mental well-being, participation, and development of Generation Z employees (Piecuch-Jodłowiec, 2024). Thus, the results of this study extend the literature by demonstrating that not only *job enrichment* in general, but also *job enrichment* based on A more participatory and empathetic HCD can increase *work engagement* more effectively.

The finding that JE-HCD has a positive effect on *job satisfaction* and a negative effect on *job-hopping intention* aligns with previous research that places job satisfaction as a key factor in suppressing job turnover intention. Fawaz and Rahman (2020) and Ardani et al. (2024) emphasized that *job satisfaction* plays a significant role in reducing *job-hopping intention*, especially among the younger generation. These results are also consistent with the study by Marta et al. (2021) which showed that *job enrichment* increases job satisfaction by increasing motivation. Furthermore, these findings support the argument of Nguyen and Le (2022) that job design factors and the quality of work experience are key determinants of *job-hopping behavior*, particularly in modern and knowledge-based sectors. Thus, this study provides empirical evidence that *human-centered job enrichment* can be an effective strategy in increasing job satisfaction and suppressing excessive job mobility.

The results of the mediation test indicate that *work engagement* and *job satisfaction* act as partial mediators in the relationship between JE-HCD and *job hopping intention*. This means that JE-HCD not only directly reduces *job hopping intention* but also indirectly through increased engagement and job satisfaction. This finding is in line with Gillet et al. (2023) who found that *work engagement* functions as a psychological mechanism linking job characteristics with turnover intention. Furthermore, this result also supports the findings of Udayani et al. (2025) who showed that *employee engagement* mediates the relationship between job satisfaction and *job hopping* in young employees. Theoretically, this finding strengthens the view of Robbins and Judge (2020) that work attitudes such as engagement and *satisfaction* are key variables in explaining employee turnover behavior.



Figure 1. Chart of model development results

The results of this study contribute to the development of the literature by offering an integrative model that combines *job enrichment* and *human-centered design* to explain the phenomenon of *job hopping* in Generation Z. In contrast to conventional job enrichment approaches that tend to be top-down (Permana & Supartha, 2019), the JE-HCD model developed in this study is more participatory, contextual, and oriented towards employee experience. These findings also complement the systematic review of Apriliani et al. (2025) which emphasized that the driving factors of job hopping are multidimensional, thus requiring a more holistic job design approach. Furthermore, these results are relevant in the context of *Industry 5.0* which emphasizes human-technology collaboration and worker well-being (Keshvarparast et al., 2024; Chand et al., 2026). Thus, this study not only strengthens empirical evidence on the role of *job enrichment* in suppressing *job hopping* but also emphasizes the importance of a human-centered approach in designing jobs for Generation Z.

CONCLUSION

Human-Centered Design-based job enrichment developed through qualitative methods (interviews and FGDs) successfully identified key dimensions relevant to Generation Z employees in North Sumatra, including meaningful task variation, autonomy, two-way feedback, development opportunities, participation in decision-making, and proportional work flexibility. Quantitative testing using SEM-PLS confirmed that this HCD-based job enrichment positively and significantly influences work engagement and job satisfaction, while negatively and significantly affecting job hopping intention. Furthermore, work engagement and job satisfaction were proven

to mediate the relationship between HCD-based job enrichment and job hopping intention, indicating that participatory and human-centered job design increases engagement and satisfaction, which ultimately reduces turnover intention. The proposed model is applicable across multiple industrial sectors—services, manufacturing, and banking—in North Sumatra, with necessary adjustments to flexibility levels and autonomy forms according to organizational characteristics and job types. Practically, the model offers a valuable reference for HR managers and practitioners in designing job design interventions aimed at improving Generation Z employee retention, particularly in developing regions facing labor competition and limited resources.

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