JURNAL UPI

MIMBAR PENDIDIKAN:
Jurnal Indonesia untuk Kajian Pendidikan
Journal homepage: https://ejournal.upi.edu/index.php/mimbardik

THE INFLUENCE OF ADAPTIVE BEHAVIOR AND EMPLOYEE PERFORMANCE IN A STRUCTURED MANUFACTURING ENVIRONMENT: A CRITICAL EVALUATION OF JD-R MOTIVATIONAL MECHANISMS

Nurdiansyah Nugraha[1], Muhamad Fuji Rahman[2]

Universitas Paramadina Indonesia[12]
Correspondence Email: nurdiansyah.nugraha@gmail.com

ABSTRACT

This study examines the implementation of adaptive behavior and proactive employee initiatives within a highly mechanistic operational system, specifically in a Japanese joint-venture manufacturing company. The primary objective is to analyze the impact of Career Crafting (CC) and Proactive Career Orientation (PKO) on performance outcomes, while re-evaluating the robustness of Work Engagement (WE) as a mediator within the Job Demands-Resources (JD-R) theory. Career Crafting concerns proactive behavioral adjustments to work tasks and relationships, whereas Proactive Career Orientation reflects a broader dispositional, future-oriented motivation. Using a cross-sectional design appropriate for examining relationship magnitude and direction at one point in time, data were collected from 157 PT KBI employees and analyzed using SEM-PLS, with procedural remedies applied to mitigate common method bias (Podsakoff et al., 2003). The absorption dimension was deliberately excluded from WE on theoretical grounds: sustained task immersion may reduce situational awareness and elevate risk in safety-critical production settings (Bakker et al., 2008). Results show career crafting is the strongest direct driver of performance, while PKO alone shows no significant direct effect. Notably, WE did not significantly mediate the relationship between adaptive career behaviors and performance, indicating that the JD-R motivational pathway operates differently under high formalization. This study contributes to JD-R literature by empirically positioning strict SOPs as a boundary condition constraining motivational mechanisms, an aspect underexplored in manufacturing management research. Findings suggest productivity in mechanistic environments is driven more by practical task-modification and procedural compliance than psychological engagement. Managerially, firms in similar contexts should prioritize structured career crafting programs—such as cognitive reframing workshops and peer-mentoring—over engagement-centered interventions alone.

ARTICLE INFO

Article History:
Submitted/Received 18 May 2026
First Revised 22 May 2026
Accepted 28 May 2026
First Available online 23 June 2026
Publication Date 23 June 2026

Keywords:
Career Crafting; Proactive Career Orientation; Work Engagement; Employee Performance; Manufacturing Industry; Standard Operating Procedures (SOPs).

1. INTRODUCTION

Global changes in the world of work have transformed the traditional understanding of careers. Whereas Hall (1976) conceptualized careers as linear pathways largely controlled by organizations through hierarchical structures, contemporary conditions require a different perspective. Advances in automation and growing economic uncertainty, as noted by Akkermans et al. (2024) and Hirschi and Koen (2021), increasingly compel individuals to assume greater responsibility for managing their own professional development. However, these demands for adaptability pose substantial challenges in manufacturing environments characterized by high levels of formalization.

Researchers can understand this unique challenge within Japanese joint-venture manufacturing organizations through the lens of modern Taylorism. In such environments, work activities are strictly measured in seconds, performed repetitively, and governed by rigorous adherence to Standard Operating Procedures (SOPs). Berdicchia et al. (2022) argued that highly formalized work systems tend to limit employees' opportunities to express creativity. Similarly, Wang et al. (2021) suggested that bureaucratic organizational structures may suppress proactive intentions when employees are provided with insufficient opportunities to modify or influence their work.

Production operators are often exposed to repetitive, highly standardized tasks, which may increase the risk of intellectual stagnation and work-related boredom. To address these challenges, Akkermans and Tims (2017) introduced the concept of Career Crafting, which refers to individuals' proactive efforts to align their work with personal values and career aspirations without violating formal organizational requirements. In highly structured manufacturing settings, Tims et al. (2022) and Zhang and Parker (2023) argued that such adaptation functions as a form of self-regulation, manifested through changes in the way employees interpret their work (cognitive crafting) and develop workplace relationships (relational crafting).

These adaptive behaviors are expected to enhance work engagement, a positive psychological state characterized by enthusiasm, energy, and commitment toward work (Bakker & Demerouti, 2008). When employees demonstrate high levels of energy, dedication, and involvement in their work, they are more likely to exhibit effective, productive, and goal-oriented work behaviors, thereby contributing to improved performance (Schaufeli et al., 2002). Nevertheless, this relationship may not operate uniformly across all organizational contexts. In highly structured manufacturing environments, where strict operational standards and quality-control systems prevail, employee performance is often determined more by compliance with established procedures than by emotional attachment to work. Consequently, the relevance and strength of the relationship between work engagement and employee performance in mechanistic industrial settings remain open to empirical examination.

Despite growing academic interest in proactive behavior (Rudolph et al., 2017), existing research has largely focused on organizational contexts characterized by high levels of job autonomy, such as technology firms and knowledge-intensive industries. As a result, limited attention has been given to the effectiveness of proactive behaviors in work

environments where opportunities for flexibility and individual discretion are relatively restricted. This gap is particularly consequential in the context of Japanese joint-venture manufacturing firms, which represent a theoretically distinct setting for testing the JD-R Model. Unlike general manufacturing or professional service contexts, Japanese-influenced production systems combine modern Taylorism with strict procedural compliance norms, creating a unique organizational configuration in which both personal resources (such as proactive career orientation) and motivational mechanisms (such as work engagement) may operate under different boundary conditions than those documented in existing literature (Berdicchia et al., 2022; Wang et al., 2021). Furthermore, although the JD-R Model has been extensively validated in professional service and knowledge work contexts, empirical evidence on its boundary conditions in highly formalized manufacturing environments remains sparse. Specifically, the role of Standard Operating Procedures (SOPs) as a potential structural constraint on the resource-engagement-performance mechanism has not been explicitly examined in prior empirical work, representing a clear and addressable gap in the JD-R literature. Addressing this research gap, the present study aims to comprehensively examine the effects of Proactive Career Orientation and Career Crafting on employee performance at PT KBI. Furthermore, the study examines the extent to which the motivational mechanisms proposed by the Job Demands–Resources (JD–R) Model continue to explain employee behavior in a manufacturing organization operating under highly formalized procedures and strict work regulations.

2. LITERATURE REVIEW

This study integrates two major theoretical frameworks. First, Career Construction Theory (CCT), developed by Savickas (2005), views careers as subjective constructions shaped through individuals' adaptive actions to maintain professional sustainability. Second, the Job Demands–Resources (JD–R) Model proposed by Bakker and Demerouti (2008) explains how the availability of job resources can stimulate motivational processes that enhance employee performance. Within the context of PT KBI, these two theoretical perspectives are examined through the lens of modern Taylorism, in which every work activity is measured in seconds and employees are expected to comply with standard operating procedures (SOPs) strictly.

2.1 Proactive Career Orientation

Proactive Career Orientation (PCO) refers to an individual's tendency to take active initiative in planning, developing, and managing their future career. Individuals with a proactive career orientation do not merely wait for opportunities to emerge; rather, they actively seek opportunities for self-development to adapt to changes in the work environment. In organizations characterized by formal, highly structured work systems, proactive behavior becomes increasingly important for anticipating the risk of skill obsolescence.

This concept is consistent with the view of Strauss et al. (2012), who argued that individuals' future work selves can stimulate proactive career behaviors and career development efforts. Seibert et al. (2001) further demonstrated that proactive personality is

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

positively associated with long-term career success. However, Wang et al. (2021) emphasized that the effectiveness of proactive orientation may not always be optimal in bureaucratic organizations with high levels of formalization, where individual discretion is often constrained by established procedures and hierarchical structures. It is important to conceptually distinguish Proactive Career Orientation (PCO) from Career Crafting (CC), as both constructs involve proactive elements but differ in nature and level of analysis. PCO operates primarily at the dispositional and motivational level—it reflects an individual's stable tendency to anticipate, plan, and self-initiate career-related actions in the future.

In contrast, Career Crafting operates at the behavioral level—it refers to specific, observable adjustments that individuals make to the content, boundaries, and relational aspects of their current work role (Akkermans & Tims, 2017). In the JD-R framework, PCO functions as a personal resource that fuels motivational processes (and thus influences work engagement). At the sane time, Career Crafting serves as a resource-building behavior that directly modifies the work environment and task structure. This distinction is critical for avoiding construct overlap and for interpreting the differential effects of both variables on performance outcomes in this study.

2.2 Career Crafting

Career Crafting (CC), as defined by Akkermans and Tims (2017), refers to individuals' proactive efforts to align their work with their interests, values, and long-term career goals. Such adjustments can be made through changes in the way individuals perceive their work (cognitive crafting) as well as through the management of workplace relationships and social interactions within the organization (relational crafting). Therefore, career crafting is not only concerned with the current job but also with individuals' efforts to shape a career that is consistent with their personal goals and aspirations.

According to Tims et al. (2022), career crafting can help employees optimize their psychological resources and pursue personal development within formal and structured work environments without violating organizational procedures or operational standards. In addition, Zhang and Parker (2023) described crafting as a behavioral framework that incorporates cognitive and relational dimensions in the workplace, highlighting the role of proactive adaptation in career development.

2.3 Work Engagement

Work engagement refers to a positive psychological state that reflects the extent to which individuals are involved in and committed to their work. In this study, the construct is represented by two primary dimensions, namely vigor and dedication. This operationalization was adopted following statistical analyses indicating that several indicators (WE6, WE7, and WE9) did not meet the required measurement criteria. Furthermore, the absorption dimension was not retained for both theoretical and contextual reasons. Theoretically, absorption—defined as the state of being fully concentrated and deeply engrossed in one's work to the point where time passes quickly (Schaufeli et al., 2006)—implies a degree of cognitive detachment from the immediate physical environment that is fundamentally incompatible with safety-critical production settings. In environments such as the production floor of PT KBI, where machinery-related hazards and quality-control

requirements demand continuous situational awareness, a high level of absorption may paradoxically increase occupational risk rather than enhance performance. This argument aligns with the view of Bakker et al. (2008), who noted that the functional significance of engagement dimensions may vary across work contexts. Empirical support for this decision is further provided by the poor statistical fit of the absorption indicators in the measurement model, suggesting that the absorption dimension does not adequately reflect work engagement experience under strict SOP conditions. Taken together, these theoretical and empirical considerations justify operationalizing work engagement as a two-dimensional construct in this study. Manufacturing operations require employees to maintain a high level of situational awareness to support workplace safety and operational reliability.

The concept of work engagement in this study is based on the model developed by Schaufeli et al. (2006), who introduced and validated the Utrecht Work Engagement Scale (UWES-9). According to this model, work engagement comprises three dimensions: vigor, dedication, and absorption. Li et al. (2025) found that career crafting can enhance employee well-being and work engagement by fostering a stronger professional identity. However, Berdicchia et al. (2022) argued that high levels of organizational formalization may constrain the influence of work engagement on actual work outcomes.

Accordingly, this study operationalizes work engagement as a two-dimensional construct consisting of vigor and dedication. This theoretical and empirical decision was made to accommodate the characteristics of the manufacturing industry, in which employees must maintain continuous awareness of their work environment. Consequently, vigor and dedication were considered more appropriate dimensions for capturing employee engagement within a highly structured operational context.

2.4 Employee Performance

Employee performance is defined as the degree to which individuals successfully carry out their assigned duties and responsibilities while contributing to the achievement of organizational goals. The measurement of performance in this study focuses on task performance, which encompasses the ability to complete work in accordance with operational standards, meet deadlines, and maintain a low rate of work-related errors. This perspective aligns with Koopmans et al. (2014), who conceptualized individual performance as work behaviors aligned with organizational objectives. Furthermore, Berdicchia et al. (2022) emphasized that task performance is a critical factor in supporting operational effectiveness, particularly in manufacturing environments that require consistency, accuracy, and reliability in work execution.

2.5 Hypothesis

2.5.1 Proactive Career Orientation and Work Engagement.

From the perspective of the Job Demands–Resources (JD–R) Model, individuals' psychological resources play an important role in enhancing work engagement by fostering intrinsic motivation and positive work-related attitudes. Employees with a Proactive Career Orientation (PCO) tend to be more active in planning their career development, improving their competencies, and preparing themselves to cope with workplace dynamics and

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

environmental changes. Strauss et al. (2012) found that proactive career orientation is associated with positive work behaviors and greater job involvement.

Individuals with a proactive career orientation are more likely to perceive career-related challenges as opportunities for growth and development. As a result, they tend to invest greater effort and energy in their work, which can strengthen their sense of dedication and enthusiasm. Within the JD–R framework, proactive career orientation may function as a personal resource that stimulates motivational processes and promotes higher levels of work engagement. Therefore, employees who actively manage and develop their careers are expected to demonstrate stronger engagement in their work.

H1: Proactive Career Orientation has a positive effect on Work Engagement.

2.5.2 Career Crafting and Work Engagement

The concept of career crafting suggests that individuals actively shape their work experiences to better align with their personal goals and values. From the perspective of Self-Determination Theory (SDT; Deci & Ryan, 2000), such adaptive efforts can enhance individuals' sense of ownership and autonomy in their work, thereby fostering greater enthusiasm and dedication. More specifically, SDT posits that the fulfillment of three basic psychological needs—autonomy, competence, and relatedness—is fundamental to intrinsic motivation and sustained engagement. Career crafting behaviors, even when enacted within the constraints of a highly formalized system, may partially satisfy these needs by allowing employees to reframe their tasks cognitively, proactively expand their knowledge, and strengthen collegial relationships within the boundaries set by the SOP structure. In this way, SDT provides the motivational microfoundation for the JD-R Model in this study: career crafting functions as a personal resource that builds psychological need satisfaction, which, in turn, fuels engagement. Tims et al. (2022) argued that career crafting enables individuals to optimize their personal resources and create more meaningful work experiences, which in turn contribute to higher levels of work engagement. Importantly, even in a highly mechanistic manufacturing environment where SOPs structurally constrain task autonomy, employees retain a degree of agency in how they cognitively approach and relationally navigate their roles. Career crafting in this context may manifest through boundary-compatible micro-adaptations—such as seeking skill-enriching feedback, reframing routine tasks as contributing to broader organizational goals, or voluntarily mentoring peers—that are sufficient to sustain motivational arousal (vigor) and personal identification with work (dedication) without violating procedural boundaries. Based on this integrated SDT-JD-R reasoning, it is hypothesized that:

H2: Career Crafting has a positive and significant effect on Work Engagement.

2.5.3. Work Engagement and Employee Performance

In the field of Organizational Behavior, employees with high levels of work engagement generally exhibit more positive work behaviors and higher productivity. Work engagement, reflected through vigor and dedication, encourages individuals to work more diligently, remain focused, and take greater responsibility for their job outcomes. Schaufeli et

al. (2006) found that work engagement is positively associated with individual performance. Engaged employees are more likely to invest substantial physical, cognitive, and emotional resources in their work, thereby enhancing their effectiveness and overall job performance.

H3: Work Engagement has a positive and significant effect on Employee Performance.

2.5.4 Proactive Career Orientation and Employee Performance

Individuals with a Proactive Career Orientation (PCO) tend to be better prepared to cope with workplace changes and challenges. From a proactive behavior perspective, employees who actively manage and develop their careers are more likely to improve the quality of their work and maintain consistent performance. By continuously seeking opportunities for learning and self-development, proactive individuals can adapt more effectively to changing job demands and organizational expectations. Seibert et al. (2001) demonstrated that proactive personality is positively associated with long-term career success and job performance. However, it is important to note that translating proactive career orientation into observable performance outcomes may be more constrained in highly formalized manufacturing environments than in autonomous professional contexts. In SOP-governed workplaces, having a proactive career disposition may be insufficient on its own to produce direct performance improvements, because performance evaluation criteria are tightly linked to procedural compliance rather than to initiative-driven task variation. Consistent with Wang et al. (2021), the direct effect of PCO on performance in mechanistic contexts may be attenuated or channeled primarily through motivational mediators such as work engagement. Nevertheless, a positive direct effect remains plausible, as proactive employees may achieve higher procedural mastery more rapidly, engage more consistently in safety-compliant behaviors, and maintain a stronger goal-directed focus. Accordingly, while acknowledging the contextual contingency of this relationship.

H4: Proactive Career Orientation has a positive and significant effect on Employee Performance.

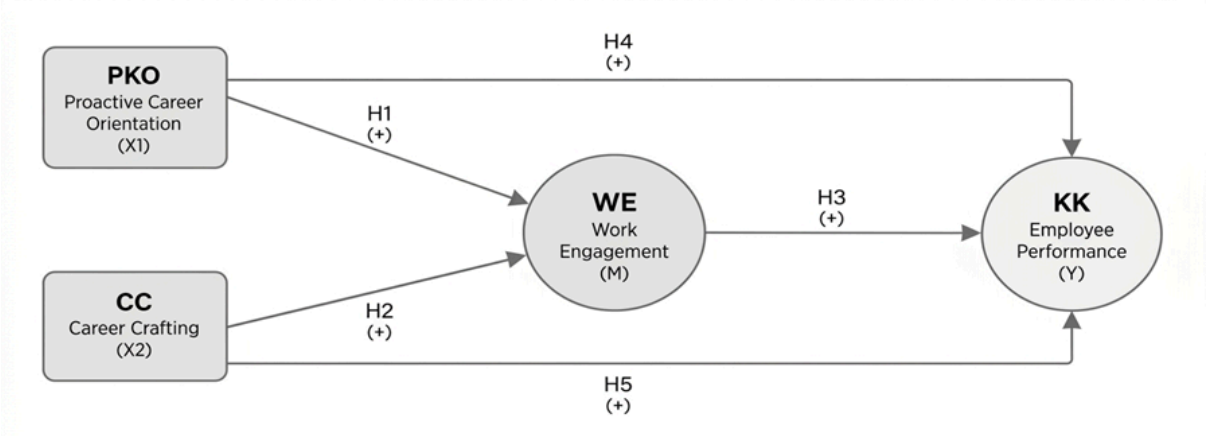
2.5.5 Career Crafting and Employee Performance

Career crafting enables individuals to adjust their work approaches, workplace interactions, and perceptions of their jobs to better align with their career goals and aspirations. In formal work environments such as the manufacturing industry, these adaptive efforts can help employees improve the quality of their work while remaining consistent with organizational procedures and operational standards. Through career crafting, employees can optimize their competencies, resources, and work strategies, thereby enhancing their effectiveness in performing job-related tasks. Akkermans and Tims (2017) argued that career crafting contributes to the development of individual competencies and work effectiveness.

H5: Career Crafting has a positive and significant effect on Employee Performance.

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

Figure 2.1. Research Hypothesis Model



3. METHODS

3.1 Research Design and Sampling Technique

This study employed a quantitative, explanatory research design to examine the causal relationships among the variables under investigation. Data were collected using a cross-sectional survey in which all information was collected at a single point in time. The population consisted of all employees of PT KBI, a Japanese-invested joint venture plastic component manufacturing company, whose operational processes are governed by strict adherence to Standard Operating Procedures (SOPs).

Respondents were selected using a purposive sampling technique. The sample included permanent employees, fixed-term contract employees, outsourced workers, and apprenticeship participants who were actively employed by the company and had a minimum tenure of one year. The decision to include respondents across different employment statuses in a single analytical model was informed by the research objective of capturing the broadest possible range of career adaptive behaviors within a unified organizational context. All respondents shared the same work environment, were subject to the same SOP regime, and were engaged in comparable production tasks, suggesting that the primary variables of interest—career crafting, proactive career orientation, and work engagement—operate through similar psychological mechanisms regardless of contractual status (Koopmans et al., 2014). Nevertheless, the authors acknowledge that employment status may moderate career attitudes and engagement levels; accordingly, demographic data on employment status were collected and analyzed descriptively, and future research is encouraged to test these relationships using multi-group analysis (MGA) to detect potential between-group differences. The sample size was determined according to the recommendations of Hair et al. (2021) for PLS-SEM analysis, considering both the 10-times rule and statistical power requirements. Given the four latent variables included in the research model, the minimum recommended sample size was 127 respondents. A total of 157 valid responses were obtained, exceeding the minimum requirement and providing adequate statistical power of 80% at a significance level of 0.05.

3.2 Data Collection Procedure and Common Method Bias Mitigation

Data were collected through a structured questionnaire that allowed respondents to provide self-reported assessments based on their experiences and perceptions. Because this

approach may introduce Common Method Bias (CMB), several mitigation procedures were implemented. Following the recommendations of Podsakoff et al. (2003), respondents were assured of complete anonymity and confidentiality, and they were informed that there were no right or wrong answers.

The questionnaire was distributed through both offline (face-to-face) and online channels using Google Forms. Data collection was conducted outside regular production-line operating hours to enable respondents to complete the questionnaire with greater concentration and without interference from work-related activities. In addition to these procedural remedies, Common Method Bias was statistically assessed using Harman's single-factor test. Acknowledging the recognized limitations of Harman's single-factor test as a stand-alone CMB diagnostic (Podsakoff et al., 2003; Kline et al., 2011), the present study supplemented this assessment with a full collinearity assessment using Variance Inflation Factor (VIF) values for all construct pairs in the structural model. VIF values below 3.3 were interpreted as indicating the absence of common method bias, consistent with Kock's (2015) recommendation. All VIF values in this study were within the acceptable range, providing additional empirical confidence that common method bias does not substantially distort the findings. The authors recognize that self-reported performance measures nonetheless represent a methodological limitation, as discussed in the limitations section.

3.3 Measurement Instruments

All latent variables were measured using a five-point Likert scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Since the measurement instruments were originally developed in English, a back-translation procedure was employed to ensure semantic equivalence and contextual validity in Indonesian.

Proactive Career Orientation was measured using four items adapted from the Proactive Career Behavior scale developed by Strauss et al. (2012). Career Crafting was assessed using six items from the Career Crafting Questionnaire (CCQ) developed by Akkermans and Tims (2017). Work Engagement was measured using the short version of the Utrecht Work Engagement Scale (UWES-9) developed by Schaufeli et al. (2006). Employee Performance was assessed using six items adapted from the Individual Work Performance Questionnaire (IWPQ) developed by Koopmans et al. (2014), covering both task performance and contextual performance dimensions.

3.4 Data Analysis Strategy

Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). The researcher selected this method because it enables the simultaneous examination of both direct and indirect relationships among latent variables within a single research model. In addition, PLS-SEM is recognized for its robustness when dealing with data that do not satisfy the assumption of normal distribution (Hair et al., 2021).

The analysis consisted of two main stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model). The outer model assessment was performed to examine the reliability and validity of the measurement instruments. Construct reliability was evaluated using Cronbach's Alpha and Composite

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

Reliability (CR), with a recommended minimum threshold of 0.70. Convergent validity was assessed through the Average Variance Extracted (AVE), with a minimum acceptable value of 0.50. Discriminant validity was examined using the Heterotrait–Monotrait Ratio (HTMT), with values below 0.90 considered acceptable (Henseler et al., 2015).

The inner model was evaluated using a bootstrapping procedure with 5,000 subsamples. The relationships among variables were considered statistically significant when the *t*-statistics > exceeded 1.96, and the *p*-values were < 0.05.

4. RESULTS AND DISCUSSION

4.1 Respondent Characteristics

A total of 157 respondents participated in this study after meeting the predetermined eligibility criterion of having at least one year of work experience within the organization. We collected the data through a structured questionnaire using purposive sampling. The demographic characteristics of the respondents, including gender, age, tenure, employment status, and job level, are summarized in Table 4.1.

Table 4.1

Demographic Characteristics of Respondents (N = 157)

Demographic Characteristics	Category	Frequency (f)	Percentage (%)
Gender	Male	118	75,2%
	Female	39	24,8%
Age	< 25 Years Old	21	13,4%
	25–30 Years Old	63	40,1%
	31–35 Years Old	42	26,8%
	36–40 Years Old	19	12,1%
	> 40 Years Old	12	7,6%
Tenure (Length of Service)	1–3 Years	52	33,1%
	4–7 Years	71	45,2%
	> 7 Years	34	21,7%
Employment Status	Permanent Employee	121	77,1%
	Contract Employee (PKWT)	24	15,3%
	Outsourced Employee	8	5,1%
	Apprenticeship / Intern	4	2,5%
Job Level (Position)	Staff / Operator	89	56,7%
	Technician / Engineer	46	29,3%
	Supervisor / Manager	22	14,0%
		157	**100%**

Based on the data presented in Table 4.1, the majority of respondents were male, accounting for 118 individuals (75.2%). This predominance of male employees is consistent

with the general characteristics of the manufacturing sector, which often involves physically demanding tasks and more intensive shift-based work arrangements.

In terms of age, respondents were primarily concentrated within the early productive age groups, with the largest proportion falling within the 25–30 years age range (40.1%), followed by those aged 31–35 years (26.8%). This distribution suggests that the workforce is largely composed of individuals in their prime professional years, characterized by high energy levels, adaptability to technological changes, and relatively stable emotional maturity in the workplace.

Workforce maturity is further reflected in respondents' tenure profiles, as the largest proportion reported having between four and seven years of work experience (45.2%). Given that all respondents had completed at least one year of employment, this finding indicates that the majority of the sample possessed substantial familiarity with the organization's work culture, operational routines, and internal environment.

This observation is reinforced by respondents' employment status, with most participants (77.1%) being permanent employees. The high proportion of permanent staff and relatively long tenure suggest favorable employee retention and a strong sense of job security among the workforce.

Regarding job level, Staff/Operators constituted the largest group, representing 56.7% of respondents, followed by Technicians/Engineers (29.3%) and managerial personnel (Supervisors/Managers) at 14.0%. This distribution reflects a typical organizational pyramid structure in which the largest proportion of employees occupies operational roles directly involved in production activities.

Overall, the respondent profile reflects the actual workforce composition of a manufacturing company characterized by high levels of formalization and strict operational standards. We included these demographic variables solely for descriptive purposes to support the interpretation of the findings, rather than as control variables in the SEM-PLS model.

4.2 Measurement Model Evaluation

4.2.1 Factor Loading

Figure 4.1 presents the results of the initial assessment of the measurement model (outer model) using SmartPLS. The initial evaluation indicated that several indicators exhibited factor loadings below the recommended threshold of 0.70. Moreover, several indicators showed loadings below 0.50, namely WE6, WE7, WE9, KK4, KK5, and CC2. Consequently, further model refinement was undertaken by removing these indicators to improve the measurement model's convergent validity and reliability.

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

Figure 4.1. Initial SmartPLS Measurement Model

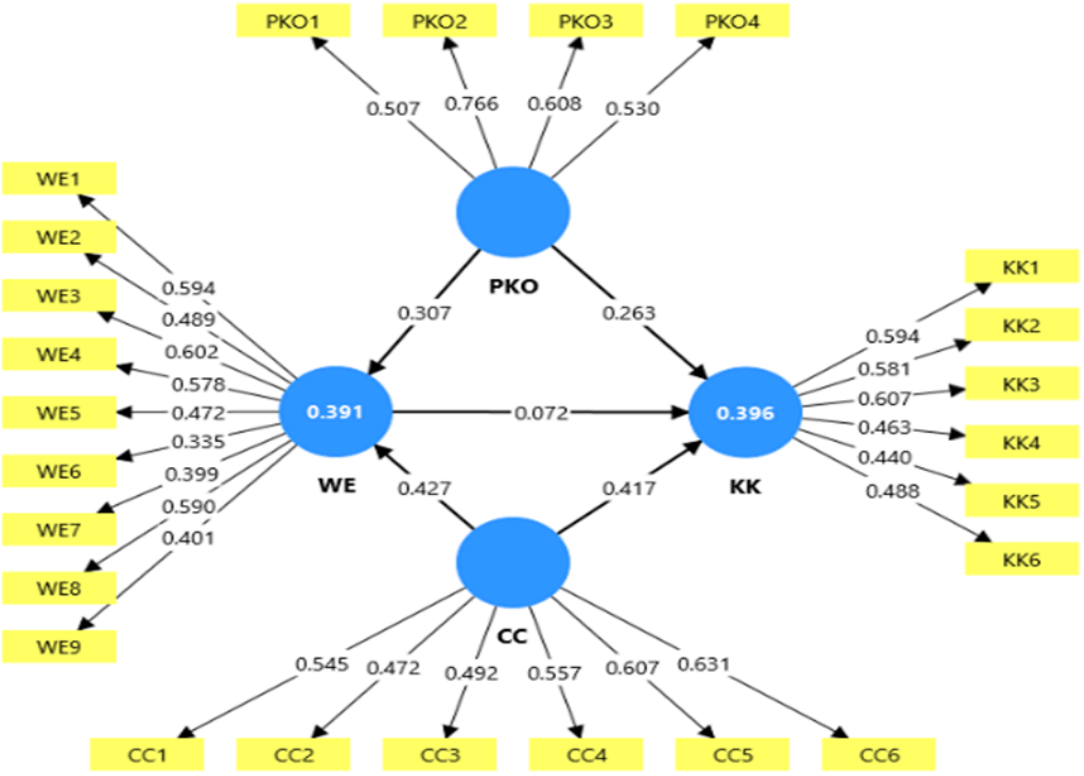
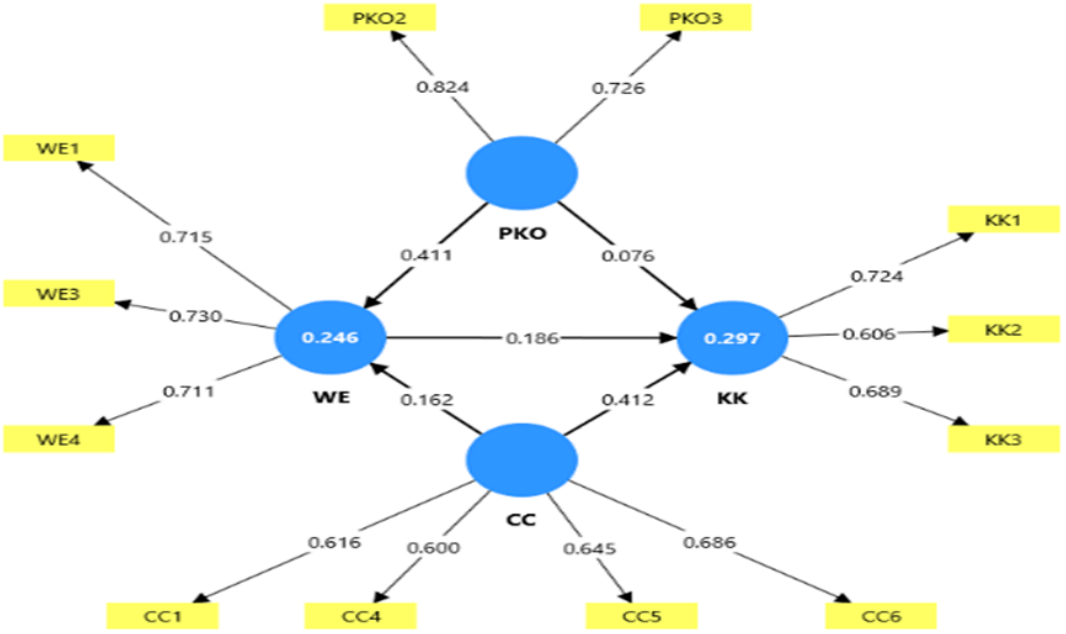


Figure 4.2 illustrates the final research model after the model purification process, in which indicators with low contributions were removed. The Proactive Career Orientation (PKO) construct was measured by two indicators, namely PKO2 and PKO3, with factor loadings of 0.824 and 0.726, respectively. The Work Engagement (WE) construct was represented by WE1, WE3, and WE4. The Career Crafting (CC) construct consisted of four indicators (CC1, CC4, CC5, and CC6), with factor loadings ranging from 0.600 to 0.686. For the Employee Performance (KK) construct, three indicators were retained, namely KK1, KK2, and KK3, with factor loadings ranging from 0.606 to 0.724.

In the final structural model, the coefficient of determination (R^2) for Work Engagement (WE) was 0.246, indicating that Proactive Career Orientation (PKO) and Career Crafting (CC) jointly explained 24.6% of the variance in Work Engagement. Meanwhile, the R^2 value for Employee Performance (KK) was 0.297, suggesting that PKO, CC, and WE collectively accounted for 29.7% of the variance in employee performance.

Figure 4.2. Final SmartPLS Research Model



4.2.2 Construct Reliability and Validity

Figure 4.3 Construct Reliability and Validity

Construct reliability and validity - Overview

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
CC	0.514	0.514	0.732	0.407
KK	0.406	0.411	0.714	0.455
PKO	0.407	0.438	0.714	0.459
WE	0.564	0.573	0.752	0.433

The reliability assessment indicated that all research constructs met the recommended criteria, with Composite Reliability (rho_c) values ranging from 0.714 to 0.752 and exceeding the minimum threshold of 0.70. Although the Cronbach's Alpha values for several constructs were below 0.70, construct reliability was considered acceptable because the Composite Reliability values satisfied the recommended standard.

Regarding convergent validity, the Average Variance Extracted (AVE) values were 0.407 for Career Crafting (CC), 0.455 for Employee Performance (KK), 0.459 for Proactive Career Orientation (PKO), and 0.433 for Work Engagement (WE). Although these values were below the ideal threshold of 0.50, the measurement model was deemed acceptable according to Hair et al. (2022), who recommended that AVE values slightly below 0.50 may be tolerated when Composite Reliability exceeds 0.70. However, the authors acknowledge that AVE values consistently below 0.50 indicate that more than half of the variance in each construct is attributable to measurement error rather than to the latent variable itself, which

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

constitutes a limitation of the measurement model that should be explicitly recognized. Several contextual factors may account for the relatively modest AVE values. First, the behavioral and attitudinal constructs used in this study (career crafting, proactive orientation, engagement) inherently encompass multifaceted, context-dependent behavioral expressions that are difficult to fully capture with the limited number of retained indicators, particularly after the model purification process. Second, the use of back-translated and adapted instruments in an Indonesian manufacturing context—where the constructs were originally developed and validated in Western knowledge-work settings—may introduce systematic translation-related or cross-cultural construct variance, thereby inflating error terms. Third, the strict SOP environment may compress the range of behavioral expression, thereby limiting within-construct item covariation. These considerations justify retaining the model as analytically acceptable while underscoring the importance of developing more contextually calibrated measurement instruments in future research. Regarding factor loadings approaching 0.60—particularly for the Career Crafting construct (range: 0.600–0.686)—these values, while modest, remain above the minimum threshold of 0.60 recommended for exploratory stages of construct validation in applied organizational research (Hair et al., 2021). The authors acknowledge this as a limitation and recommend that future studies employ confirmatory factor analysis with larger samples to verify construct stability across contexts.

Furthermore, a model purification procedure was conducted to remove several indicators, ensuring that the retained measures adequately represented adaptive behaviors relevant to the highly standardized manufacturing work environment examined in this study.

4.2.3 Discriminant Validity (HTMT)

Based on the results of the discriminant validity assessment using the Heterotrait–Monotrait Ratio (HTMT) criterion, all construct pairs exhibited HTMT values below the recommended threshold of 0.90. These findings indicate that each construct represents a distinct concept and that there is no substantial overlap among the measurement constructs. Therefore, the measurement model's discriminant validity is satisfactory, confirming that the constructs are empirically distinct.

Table 4.6 HTMT Discriminant Validity

Variable	CC	KK	PKO	WE
CC	—			
KK	0,71	—		
PKO	0,65	0,52	—	
WE	0,74	0,69	0,61	—

4.3 Structural Model Evaluation (Inner Model)

4.3.1 R-Square (R^2)

The coefficient of determination (R^2) for Work Engagement was 0.246, indicating that Proactive Career Orientation (PKO) and Career Crafting (CC) jointly explained 24.6% of the

variance in Work Engagement. Meanwhile, the R^2 value for Employee Performance (KK) was 0.297, suggesting that Proactive Career Orientation (PKO), Career Crafting (CC), and Work Engagement (WE) collectively accounted for 29.7% of the variance in employee performance.

Table 4.1 R-Square

Endogen Variables	R-Square
Work Engagement (WE)	**0,246**
Employee Performance (KK)	**0,297**

Table 4.2 Effect Size (F^2)

Relationship	F^2	Category
PKO → WE	**0,210**	**Moderate**
CC → WE	**0,045**	**Small**
WE → KK	**0,032**	**Small**
PKO → KK	**0,005**	**Very small**
CC → KK	**0,238**	**Moderate**

The effect-size analysis indicated that Career Crafting (CC) had a moderate effect on Employee Performance (KK), whereas Proactive Career Orientation (PKO) had a negligible effect on Employee Performance (KK).

4.4 Hypothesis Testing

Table 4.3 Hypothesis Testing (Bootstrapping)

Hypothesis	Coeff.	T-Stat.	P-Value	Result
PKO → WE (H1)	**0,411**	**4,120**	**0,000**	✅ **Supported**
CC → WE (H2)	**0,162**	**2,099**	**0,036**	✅ **Supported**
WE → KK (H3)	**0,186**	**2,131**	**0,034**	✅ **Supported**
PKO → KK (H4)	**0,076**	**0,829**	**0,408**	❌ **Not Supported**
CC → KK (H5)	**0,412**	**4,682**	**0,000**	✅ **Supported**

The hypothesis-testing results indicate that four of the five proposed relationships received empirical support. Proactive Career Orientation (PKO) was found to have a positive and significant effect on Work Engagement (WE), but it did not exhibit a significant direct effect on Employee Performance (KK). Work Engagement (WE) demonstrated a significant positive effect on Employee Performance (KK). Furthermore, Career Crafting (CC) showed positive and significant effects on both Work Engagement (WE) and Employee Performance (KK).

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

4.5 Mediation Analysis

Table 4.4 Mediation Analysis Results (Specific Indirect Effects)

Mediation Path	P-Value	Result
CC → WE → KK	0,137	❌ Not Supported
PKO → WE → KK	0,061	❌ Not Supported

The mediation analysis revealed that all indirect paths examined produced p-values above the 0.05 significance threshold. Based on these findings, Work Engagement (WE) did not mediate the relationships between Proactive Career Orientation (PKO) and Employee Performance (KK), nor between Career Crafting (CC) and Employee Performance (KK). Therefore, the mediating role of Work Engagement in the proposed model was not empirically supported.

4.6 Discussion

4.6.1 The Effect of Proactive Career Orientation on Work Engagement

Proactive Career Orientation (PKO) was found to have a positive and significant effect on Work Engagement (WE), with a path coefficient of 0.411 and a p-value of 0.000; therefore, H1 was supported. This finding indicates that a proactive career orientation is associated with higher levels of work engagement among employees. Conceptually, individuals with a strong career orientation possess a strong internal drive for growth and development, which fosters deeper psychological and emotional involvement in their work. This finding is consistent with the studies by Hirschi and Koen (2021) and De Vos et al. (2020), which emphasize the importance of proactive career management for enhancing employee engagement.

4.6.2 The Effect of Career Crafting on Work Engagement

Career Crafting (CC) was found to have a positive and significant effect on Work Engagement (WE), with a path coefficient of 0.162 and a p-value of 0.036; therefore, H2 was supported. Employees who engage in Career Crafting tend to create more positive meanings from their work through cognitive crafting and relational crafting. Within the Job Demands–Resources (JD–R) Model, Career Crafting can be viewed as a proactive behavior through which individuals enhance the availability and utilization of work-related resources (Akkermans & Tims, 2017; Tims et al., 2022). As a result, employees become more enthusiastic, dedicated, and psychologically invested in their work.

4.6.3 The Effect of Work Engagement on Employee Performance

Work Engagement (WE) demonstrated a positive and significant effect on Employee Performance (KK), with a path coefficient of 0.186 and a p-value of 0.034; therefore, H3 was supported. Employees with high levels of engagement tend to exhibit greater enthusiasm in performing their tasks and are better able to maintain focus and commitment toward organizational goals. In the manufacturing context, highly engaged employees are more likely to comply with operational procedures and pay closer attention to production quality. This finding is consistent with previous studies by Schaufeli et al. (2002) and Bakker and

Demerouti (2008), which highlighted the positive relationship between work engagement and employee performance.

4.6.4 The Effect of Proactive Career Orientation on Employee Performance

Proactive Career Orientation (PKO) did not have a significant effect on Employee Performance (KK), with a path coefficient of 0.076 and a p-value of 0.408; therefore, H4 was not supported. In manufacturing companies that operate under highly standardized procedures, opportunities for employees to express personal initiative are relatively limited. This finding is consistent with Wang et al. (2021), who argued that formal organizational structures may constrain the influence of proactive behaviors on work outcomes. It also supports the view of Berdicchia et al. (2022), who suggested that adaptive capabilities in highly structured environments are more likely to be reflected in psychological adjustment than in direct improvements in formal job performance.

4.6.5 The Effect of Career Crafting on Employee Performance

Career Crafting (CC) exhibited a positive and significant effect on Employee Performance (KK), with a path coefficient of 0.412 and a p-value of 0.000; therefore, H5 was supported. Among all variables included in the model, Career Crafting demonstrated the strongest direct effect on Employee Performance. In manufacturing environments, Career Crafting represents a particularly relevant form of adaptive behavior because it does not require employees to alter formal organizational systems. Employees continue to perform their duties in accordance with established SOPs while making cognitive and relational adjustments that improve their work experiences and effectiveness. This finding is supported by Akkermans and Tims (2017) and Berdicchia et al. (2022), who emphasized the role of Career Crafting in enhancing individual effectiveness and workplace adaptation.

4.6.6 The Mediating Role of Work Engagement

The mediation analysis indicated that the motivational pathway proposed by the JD–R Model received little empirical support in the present study. This conclusion is evidenced by the p-values of the indirect effects, namely PKO → WE → KK ($p = 0.061$) and CC → WE → KK ($p = 0.137$), both of which exceeded the significance threshold of 0.05. These findings do not imply that the JD–R Model lacks validity in general. Rather, they suggest that within the context of a Japanese joint-venture manufacturing organization characterized by a high degree of formalization, the influence of proactive behaviors on employee performance is transmitted more directly through technical and procedural mechanisms than through psychological states such as work engagement.

The rigid bureaucratic structure and strict adherence to Standard Operating Procedures (SOPs) appear to limit employees' ability to translate emotional enthusiasm and psychological involvement into measurable performance outcomes. Consequently, proactive career behaviors and adaptive efforts may contribute more directly to task execution and procedural effectiveness than through motivational processes. These findings reinforce the arguments of Berdicchia et al. (2022) and Wang et al. (2021), who suggested that extreme levels of work formalization can act as contextual constraints, reducing the influence of affective variables on formal work outcomes. It is important to note, however, that the proposition that organizational formalization functions as a boundary condition limiting the

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

JD-R motivational pathway is an interpretive inference rather than a directly confirmed causal mechanism in this study. Because the degree of formalization was not treated as an explicit moderating variable in the research model, this claim should be understood as a theoretically grounded proposition awaiting direct empirical testing in future research. Alternative explanations for the non-significant mediation results should also be considered. First, the relatively low R^2 values (WE = 0.246; KK = 0.297) suggest that unmeasured variables may account for a substantial portion of variance in both outcomes, potentially attenuating the indirect effects. Second, the two-dimensional operationalization of Work Engagement (vigor and dedication only) may have reduced the construct's sensitivity as a mediator compared to the full three-dimensional UWES model. Third, measurement limitations inherent in self-reported performance data may have introduced noise, weakening the detectability of indirect effects. These alternative explanations should be acknowledged alongside the SOP-as-boundary-condition interpretation to ensure theoretical balance and intellectual rigor.

5. CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Based on this study's findings, Career Crafting (CC) emerged as the strongest predictor of Employee Performance (KK) in a highly standardized manufacturing environment. Employees who actively engage in cognitive and relational adjustments to their work are more likely to achieve higher performance levels, even within a work system governed by strict Standard Operating Procedures (SOPs). In contrast, Proactive Career Orientation (PKO) did not demonstrate a significant direct effect on Employee Performance, suggesting that highly formalized organizational structures may limit the extent to which personal initiative can be translated into measurable performance outcomes.

The findings also revealed that Work Engagement (WE) positively influenced Employee Performance but did not significantly mediate the relationships between proactive career behaviors and performance. This pattern is consistent with the interpretation that, in SOP-dominated work environments, the pathway from adaptive behaviors to performance outcomes is more direct and procedurally mediated than psychologically mediated; however, this remains an interpretive proposition rather than a tested causal claim, as organizational formalization was not directly operationalized as a moderator in the model. Furthermore, the absorption dimension appeared to be less contextually appropriate in the manufacturing setting, a decision grounded in both theoretical reasoning related to occupational safety and empirical evidence from the measurement model; this interpretation should nonetheless be treated as a contextual proposition subject to further empirical validation rather than a universal conclusion about the relevance of absorption in manufacturing contexts.

From a theoretical perspective, this study extends the Job Demands–Resources (JD–R) literature by suggesting that the effectiveness of its motivational pathway may vary across organizational contexts. In highly formalized manufacturing environments, adaptive and proactive behaviors appear to contribute to performance primarily through direct

work-related adjustments rather than through indirect psychological mechanisms. These findings highlight the importance of considering organizational formalization as a contextual boundary condition in future applications of the JD–R Model. We must acknowledge several limitations of this study. First, the single-organization research design—while enabling contextual depth—limits the generalizability of the findings to other manufacturing contexts, particularly those with different national cultures, ownership structures, or levels of technological automation. Replication in multi-site or multi-sector settings is strongly encouraged. Second, the cross-sectional design precludes causal inference, as the data were collected at a single point in time; future research should employ longitudinal or experimental designs to trace developmental relationships among career crafting, work engagement, and performance over time. Third, purposive sampling may introduce selection bias, further limiting the sample's representativeness. Future studies are encouraged to test the boundary conditions proposed in this study—particularly the moderating role of organizational formalization, safety climate, and job autonomy—using multi-group analysis or moderated mediation designs to provide more rigorous empirical validation of the theoretical propositions advanced here.

5.2 Managerial Implications

a. Based on the findings of this study, PT KBI's management may consider the following strategic initiatives.
b. Institutionalizing Career Crafting as a Key Driver of Performance. The findings indicate that Career Crafting represents the strongest direct predictor of Employee Performance. Therefore, management should not focus solely on technical compliance but also provide legitimate opportunities for employees to engage in cognitive and relational adjustments as a survival mechanism for coping with highly repetitive work routines. For example, employees may be encouraged to develop internal social networks (relational crafting), which can facilitate adaptation without violating formal organizational procedures.
c. Prioritizing SOP Compliance and Technical Competence Development. The results demonstrate that Work Engagement did not mediate between adaptive career behaviors and performance in this highly mechanistic environment. This suggests that, in SOP-governed manufacturing contexts, productivity improvements are more reliably achieved through direct procedural and technical pathways than through engagement-mediated psychological mechanisms. Practically, this means that HR managers in similar organizations should consider a dual-track development strategy: (a) continuing to invest in structured career crafting activities—such as internal rotation programs, peer coaching, and task-meaning workshops—as direct performance-enhancement tools; and (b) redesigning employee development programs to emphasize technical skill mastery, safety compliance, and procedural excellence rather than assuming that general engagement initiatives will translate linearly into performance gains. In parallel, managers should not abandon engagement programs entirely; rather, they should reframe engagement interventions to focus on vigor (energetic resource investment) and dedication (personal significance and

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

enthusiasm) while de-emphasizing absorption-inducing activities that may conflict with safety protocols. Accordingly, human resource strategies should prioritize strengthening compliance with SOPs while simultaneously investing in employee technical skill development.

d. Redesigning Motivation Programs with a Safety-Oriented Focus. Management should recognize that the absorption dimension of Work Engagement may be less relevant and potentially problematic in manufacturing settings, where excessive immersion in work could reduce situational awareness and increase safety risks. Consequently, engagement initiatives should focus specifically on strengthening vigor and dedication while maintaining high levels of safety awareness among employees.
e. Channeling Proactive Energy within Bureaucratic Boundaries. Given that Proactive Career Orientation did not directly influence formal job performance, management should not expect employees to demonstrate radical forms of individual initiative. Instead, proactive efforts should focus on improving the efficiency and effectiveness of daily task execution within existing procedural frameworks. In this context, the bureaucratic structure serves as an important boundary condition that affects the effectiveness of proactive behavior.

5.3 Recommendations for Future Research

To address the limitations of the present study and advance future research, several recommendations are proposed.

a. Employing Longitudinal Research Designs. Since this study adopted a cross-sectional design, which limits causal inference, future studies are encouraged to utilize longitudinal approaches to examine the dynamics and consistency of Career Crafting behaviors over time and to strengthen causal interpretations.
b. Utilizing Multi-Source Data. To enhance the validity of research findings and reduce self-report bias, future researchers are encouraged to collect data from multiple sources, such as supervisor evaluations and objective organizational performance records.
c. Extending JD–R Research in Mechanistic Manufacturing Settings. Further studies should investigate the applicability and effectiveness of the Job Demands–Resources (JD–R) Model in highly standardized work environments. Such investigations may help identify contextual factors that influence employee motivational processes.
d. Examining Job Autonomy as a Moderating Variable. Future research may incorporate job autonomy as a moderating variable to examine whether greater discretion in performing work tasks strengthens the relationships among adaptive behaviors, Work Engagement, and Employee Performance.
e. Comparative Research Across Different Organizational Contexts. Future studies are encouraged to compare organizations with varying levels of work formalization, such as manufacturing firms and knowledge-intensive industries. Such comparisons may provide deeper insights into whether organizational context acts as a boundary condition that influences the effectiveness of proactive career behaviors, Career Crafting, and the motivational mechanisms proposed by the JD–R Model.

6. REFERENCES

Akkermans, J., Corlett, S., & Fassiotto, M. (2024). Navigating the unknown: Career shocks, career crafting, and the transition to an AI-driven workplace. *Human Resource Management Review, 34*(1), 100987. https://doi.org/10.1016/j.hrmr.2023.100987.

Akkermans, J., & Tims, M. (2017). Crafting your career: How career competencies relate to career success via job crafting. *Applied Psychology, 66*(1), 168–195. https://doi.org/10.1111/apps.12082.

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International, 13*(3), 209–223. https://doi.org/10.1108/13620430810870476.

Berdicchia, D., Nicolli, F., & Mascia, D. (2022). Job crafting and work engagement: The moderating role of job formalization. *Human Resource Management, 61*(4), 455–472. https://doi.org/10.1002/hrm.22104.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01.[1] [NN2]

De Vos, A., Van der Heijden, B. I. J. M., & Akkermans, J. (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior, 117*, 103196. https://doi.org/10.1016/j.jvb.2018.06.011

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.). Sage.

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2022). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook. Springer. https://doi.org/10.1007/978-3-030-80519-7

Hall, D. T. (1976). Careers in organizations. Goodyear Publishing Company.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8.

Hirschi, A., & Koen, J. (2021). Contemporary career orientations and career adaptability: A review and integration. *Journal of Vocational Behavior, 126*, 103505. https://doi.org/10.1016/j.jvb.2020.103505.

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). Guilford Press.

Kock, N. (2015). Common Method Bias in PLS-SEM: A Full Collinearity Assessment Approach. *International Journal of e-Collaboration (IJeC), 11*(4), 1-10. https://doi.org/10.4018/ijec.2015100101.

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H. C. W., de Vet, H. C. W., & van der Beek, A. J. (2014). Construct validity of the individual work performance questionnaire. *Journal of Occupational and Environmental Medicine, 56*(3), 331–337. https://doi.org/10.1097/JOM.0000000000000083.

DOI: https://doi.org/10.17509/mimbardik.v11i2
p- ISSN 2527-3868 e- ISSN 2503-457X

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H. C. W., de Vet, H. C. W., & van der Beek, A. J. (2014). Measuring individual work performance: Identifying and selecting indicators. *Work, 48*(2), 229–238. https://doi.org/10.3233/WOR-131659.

Li, J., Akkermans, J., & Tims, M. (2025). Career crafting and employee well-being: The mediating role of professional identification. *Journal of Career Development, 52*(1), 3–18. https://doi.org/10.1177/08948453241243764.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879.

Rudolph, C. W., Katz, I. M., Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior, 102*, 112–138. https://doi.org/10.1016/j.jvb.2017.05.008.

Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). John Wiley & Sons.

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701–716. https://doi.org/10.1177/0013164405282471.

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two-sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*(1), 71–92. https://doi.org/10.1023/A:1015630930326.

Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology, 54*(4), 845–874. https://doi.org/10.1111/j.1744-6570.2001.tb00232.x.

Strauss, K., Griffin, M. A., & Parker, S. K. (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *Journal of Applied Psychology, 97*(3), 580–598. https://doi.org/10.1037/a0026423.

Tims, M., Twemlow, M., & Fong, C. Y. M. (2022). A state-of-the-art review of job crafting and career crafting. *Journal of Vocational Behavior, 137*, 103758. https://doi.org/10.1016/j.jvb.2022.103758.

Wang, H., Demerouti, E., & Le Blanc, P. (2021). Transformational leadership, adaptability, and job crafting: The moderating role of organizational structure. *Journal of Occupational and Organizational Psychology, 94*(3), 675–703. https://doi.org/10.1111/joop.12350.

Zhang, F., & Parker, S. K. (2023). Reorienting job crafting research: A hierarchical structure of job crafting concepts and integrative review. *Journal of Management, 49*(1), 104–135. https://doi.org/10.1177/01492063221127142.