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The Influence of Non-Financial Rewards on Employee Motivation: A Reflective-Formative Hierarchical Component Model Approach

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ABSTRACT

This study aims to examine the influence of non-financial rewards on employee motivation using a Reflective-Formative Hierarchical Component Model (HCM) approach. Non-financial rewards have become increasingly important in modern human resource management as organizations recognize that financial compensation alone is insufficient to sustain long-term employee motivation. This research addresses a critical gap in the literature by conceptualizing non-financial rewards as a multidimensional higher-order construct comprising Recognition and Appreciation, Career Development Opportunity, Work Flexibility, and Supportive Work Environment. Data were collected from 162 active employees in Indonesia through an online self-administered questionnaire using purposive sampling. Structural Equation Modeling-Partial Least Squares (SEM-PLS) with a Two-Stage Approach was employed to analyze the data. The results indicate that Non-Financial Rewards have a positive and significant influence on Employee Motivation ($\beta = 0.611$; $t = 15.070$; $p = 0.000$), with a large effect size ($f^2 = 0.597$). Recognition and Appreciation (weight = 0.601; $p = 0.000$) and Supportive Work Environment (weight = 0.338; $p = 0.012$) significantly contribute to the formation of Non-Financial Rewards, while Career Development Opportunity does not (weight = 0.246; $p = 0.097$). Work Flexibility was excluded from the model due to poor internal consistency (Cronbach's Alpha = 0.189). The model explains 37.4% of the variance in employee motivation ($R^2 = 0.374$) and demonstrates predictive relevance ($Q^2_{\text{predict}} = 0.141-0.246$). This study contributes to the Self-Determination Theory literature by empirically demonstrating how non-financial rewards collectively fulfill the basic psychological needs of autonomy, competence, and relatedness. The findings provide practical implications for organizations in designing effective non-financial reward systems.

Keywords: Non-Financial Rewards, Employee Motivation, Reflective-Formative HCM, Self-Determination.

JEL Code: E44J24, J28, M12, M52.

I. Introduction

The changing dynamics of the workplace have compelled organizations to move beyond a sole focus on financial compensation and instead prioritize the quality of employee work experiences. The Indonesia Economic Update Q3–Q4 2023 report indicates that Indonesia's labor market is becoming increasingly competitive, necessitating stronger human resource management strategies to retain quality talent. This

pressure continued into 2024, with PwC's Indonesia Economic Update Q1 2024 emphasizing that workforce dynamics, particularly regarding capability enhancement and employee work experiences, have become a primary organizational concern as part of long-term business strategy. Employee motivation remains a critical factor determining organizational success in modern human resource management. Organizations that effectively manage motivation are better positioned to achieve high productivity, strong work engagement, and stable retention rates. However, traditional approaches that rely solely on financial incentives are often insufficient to sustain long-term motivation (Irwan et al., 2025).

According to PwC's Asia Pacific Workforce Hopes and Fears Survey 2023, 75% of Indonesian employees report satisfaction with their jobs, significantly higher than the Asia Pacific average of 57%. This high level of job satisfaction warrants further investigation, as satisfaction is a key indicator of employee motivation and influences organizational performance. Prior research demonstrates that job satisfaction is influenced not only by financial compensation but also by non-financial factors such as recognition, career development opportunities, supportive work environments, and work flexibility. Non-financial rewards are defined as non-cash forms of appreciation that fulfill employees' psychological and social needs (Mustafa & Ali, 2019). These rewards include recognition of achievements, career development opportunities, work flexibility, and supportive work environments (Ce et al., 2025). Recent research confirms that non-financial rewards enhance intrinsic motivation by supporting the fulfillment of basic needs for autonomy, competence, and social relatedness (Forner et al., 2021).

These findings are reinforced by various studies in Indonesia. Mandasari and Irawanto (2024) found that employee engagement and work-life balance positively and significantly influence job satisfaction, indicating the importance of non-financial factors in enhancing employee well-being and motivation. Other research demonstrates that non-financial rewards contribute to increased productivity and work engagement (Triaji & Putri, 2024; Hidayat & Heryjanto, 2024). Additionally, supportive work environments and recognition of achievements are strongly correlated with employee motivation and satisfaction (Agus, 2024; Suciyo et al., 2025). These phenomena can be explained through both classical and contemporary motivation theories. Maslow's Hierarchy of Needs Theory emphasizes that individuals are driven by the fulfillment of higher-level needs such as esteem and self-actualization. Herzberg's Two-Factor Theory categorizes recognition, achievement, and responsibility as motivator factors that directly enhance job satisfaction. Self-Determination Theory (SDT) explains that intrinsic motivation emerges when needs for autonomy, competence, and relatedness are satisfied (Deci & Ryan, 2000; Forner et al., 2021). The Job Demands-Resources (JD-R) Model complements these approaches by positioning work flexibility, social support, and development opportunities as job resources that strengthen motivation and reduce burnout (Bakker & Demerouti, 2007; Ce et al., 2025).

Although research on non-financial rewards and work motivation has been extensive, most previous studies have treated non-financial rewards as a single variable or tested each dimension separately against work motivation. Such approaches fail to fully capture the complexity of non-financial reward systems in modern workplaces, which are inherently multidimensional. Furthermore, prior research has generally focused on the direct influence of specific factors such as work flexibility, career development, or work environment on work motivation without integrating these dimensions into a unified conceptual construct. Consequently, the hierarchical relationships among the constituent dimensions of non-financial rewards remain largely unexplored in human resource management research. From a methodological perspective, the use of Hierarchical Component Model (HCM) based on SEM-PLS in research on non-financial rewards remains relatively limited, particularly in the context of the modern Indonesian workforce. Most previous studies have employed linear regression or conventional SEM approaches that treat each dimension as a separate independent variable. Based on these conditions, this study aims to fill the research gap by developing a non-financial Rewards model as a Higher-Order Construct (HOC) formed by four Lower-Order Constructs (LOCs): Recognition and Appreciation, Career Development Opportunity, Work Flexibility, and Supportive Work Environment. This study also employs a Reflective-Formative Hierarchical Component Model (HCM) approach

in SmartPLS to provide a more comprehensive understanding of the influence of non-financial reward systems on employee motivation.

Based on the background presented, the research problem focuses on how non-financial rewards influence employee motivation, both as a holistic multidimensional construct and through the specific dimensions that constitute it. Specifically, this study examines whether non-financial rewards have a significant influence on employee motivation. Furthermore, the analysis is directed to test whether recognition and appreciation, career development opportunities, work flexibility, and supportive work environments each have a significant influence on employee motivation.

II. Literature Review and Hypothesis Development

2.1. Self-Determination Theory (SDT)

Self-Determination Theory (SDT) is a motivation theory developed by Deci and Ryan to explain how intrinsic motivation is formed through the fulfillment of basic human psychological needs. The theory explains that individuals demonstrate stronger intrinsic motivation when three fundamental needs are satisfied: autonomy, competence, and relatedness (Deci & Ryan, 2000). SDT emphasizes that motivation is influenced not only by external rewards such as financial compensation but also by psychological conditions that support individual development in the workplace. SDT provides a critical foundation for explaining the effectiveness of non-financial rewards on employee work motivation. Non-financial rewards such as recognition of achievements, career development opportunities, work flexibility, and supportive work environments can fulfill employees' basic psychological needs, thereby fostering intrinsic motivation (Deci & Ryan, 2000; Forner et al., 2021; Ce et al., 2025). When organizations create work environments that provide a sense of appreciation, opportunities for growth, freedom in work, and positive social relationships, employees tend to demonstrate higher levels of engagement and work motivation.

The need for autonomy in SDT relates to individuals' freedom to regulate their work methods and decision-making regarding their work. In this study, work flexibility is viewed as a form of non-financial reward that supports the fulfillment of autonomy by providing employees with flexibility in managing their time, location, and work methods. Previous research demonstrates that work flexibility positively relates to intrinsic motivation and job satisfaction by enhancing individuals' sense of control over their work (Mandasari & Irawanto, 2024; Ce et al., 2025). The need for competence refers to individuals' need to feel capable, to grow, and to achieve in their work. Recognition and appreciation as well as career development opportunities serve as important factors in fulfilling the competence need because both provide validation of abilities and opportunities for capacity enhancement. Research by Hidayat and Heryjanto (2024) demonstrates that career development significantly influences work motivation because employees perceive opportunities to grow within the organization. Additionally, recognition of work contributions has been shown to enhance employees' self-confidence and psychological satisfaction (Agus, 2024; Suciyo et al., 2025).

Meanwhile, the need for relatedness pertains to individuals' need to feel accepted, valued, and to have positive social relationships in the workplace. Supportive work environments play a crucial role in fulfilling this need through social support, good interpersonal relationships, and inclusive workplace culture. Previous research has found that supportive work environments can enhance work engagement, loyalty, and employee motivation by creating a strong sense of social connection within the organization (Agus, 2024; Ce et al., 2025). Thus, Self-Determination Theory serves as the grand theory of this study because it can explain the relationship between non-financial rewards and employee motivation through the mechanism of fulfilling individuals' basic psychological needs. The four dimensions of non-financial rewards in this study are understood as psychological resources that support the sustainable development of employees' intrinsic motivation (Deci & Ryan, 2000).

2.2. Herzberg's Two-Factor Theory

Herzberg's Two-Factor Theory explains that work motivation is influenced by two groups of factors: hygiene factors and motivator factors. Hygiene factors encompass aspects such as salary, company policies, and working conditions that function to prevent job dissatisfaction, while motivator factors include recognition, achievement, responsibility, and self-development that directly enhance motivation and job satisfaction (Herzberg et al., 1959; Irwan et al., 2025). Herzberg's theory is employed as a supporting framework to explain how non-financial reward dimensions function as motivator factors in enhancing employee motivation. Recognition and appreciation represent forms of appreciation that enhance individuals' sense of being valued and achieving in the workplace. Career development opportunities also constitute motivator factors because they provide opportunities for self-actualization and professional growth for employees. Previous research demonstrates that non-financial factors such as recognition, self-development, and positive work environments significantly influence work motivation and employee satisfaction (Hidayat & Heryjanto, 2024; Suciyo et al., 2025). Therefore, Herzberg's theory supports the argument that work motivation is shaped not only by financial compensation but also by positive psychological experiences that employees gain through non-financial reward systems.

2.3. Job Demands-Resources (JD-R) Model

The Job Demands-Resources (JD-R) Model explains that working conditions can be classified into job demands and job resources. Job demands refer to work requirements that demand physical and psychological effort, while job resources refer to resources that help individuals achieve work goals, reduce stress, and enhance work motivation (Bakker & Demerouti, 2007; Ce et al., 2025). In this study, non-financial reward dimensions are understood as forms of job resources that can enhance employees' intrinsic motivation. Work flexibility, career development opportunities, recognition, and supportive work environments constitute organizational resources that can help employees cope with work demands more effectively. The JD-R Model explains that the greater the job resources individuals possess, the higher their level of work engagement and motivation. Supportive work environments, for example, can help reduce psychological pressure through social support and positive interpersonal relationships. Work flexibility also provides space for employees to manage work-life balance, thereby reducing burnout and enhancing work well-being (Mandasari & Irawanto, 2024). Furthermore, career development opportunities provide competency resources that strengthen individuals' capabilities in performing their work. Thus, the JD-R Model reinforces the understanding that non-financial rewards function as essential job resources that promote employee motivation and well-being.

2.4. Maslow's Hierarchy of Needs

Maslow's Hierarchy of Needs Theory explains that individuals have needs arranged hierarchically, ranging from physiological needs, safety, social belonging, esteem, to self-actualization (Maslow, 1943). In the organizational context, higher-level needs such as esteem and self-actualization become important factors in shaping individual work motivation. Non-financial rewards such as recognition of achievements, career development opportunities, and positive work environments are closely related to fulfilling esteem and self-actualization needs. When organizations are able to fulfil these needs, employees tend to demonstrate higher work motivation and stronger organizational commitment (Irwan et al., 2025). Although Maslow's theory is a classical motivation theory, the concept of individuals' psychological needs remains relevant in explaining the importance of non-financial rewards in modern work environments. Additionally, this theory forms the foundation for the development of contemporary motivation theories such as Self-Determination Theory, which places greater emphasis on intrinsic psychological needs.

2.5. Employee Motivation

Employee motivation is defined as both internal and external drives that influence the level of enthusiasm, commitment, behavioural direction, and individual effort in performing work to achieve organizational goals. In human resource management, motivation is viewed as a critical factor determining productivity, work engagement, job satisfaction, and employee retention. Organizations that consistently maintain employee work motivation tend to demonstrate better organizational performance and lower turnover rates (Manzoor et al., 2021). According to Self-Determination Theory (SDT), work motivation can be distinguished into intrinsic and extrinsic motivation. Intrinsic motivation emerges from individuals' internal drive to perform work because it is perceived as meaningful, interesting, and providing psychological satisfaction. Meanwhile, extrinsic motivation arises from external factors such as financial rewards, punishment, or social pressure (Deci & Ryan, 2000; Forner et al., 2021). In this study, the primary focus is on intrinsic motivation because non-financial rewards are more closely associated with fulfilling employees' psychological needs than merely providing financial incentives. SDT explains that intrinsic motivation will develop when individuals' basic psychological needs for autonomy, competence, and relatedness are fulfilled (Deci & Ryan, 2000). In the workplace, the need for autonomy is reflected through freedom in organizing work, the need for competence through opportunities for growth and recognition of abilities, while the need for relatedness is reflected through positive social relationships and supportive work environments. Therefore, non-financial reward systems are considered to have a significant role in shaping employee work motivation because they support the fulfilment of these psychological needs (Forner et al., 2021; Ce et al., 2025).

2.6. Rationalization of Hierarchical Component Model (HCM)

In this study, non-financial rewards are positioned as a multidimensional construct measured using the Hierarchical Component Model (HCM) approach in Structural Equation Modelling-Partial Least Squares (SEM-PLS). The HCM approach enables the representation of multidimensional constructs more comprehensively compared to separate independent variable models because it captures the hierarchical relationships among the constituent dimensions of the primary construct (Wan Afthanorhan, 2014). According to Hair et al. (2019), HCM is employed when a construct possesses a higher level of abstraction and consists of several different conceptual dimensions that remain within the same overarching concept. In this study, the non-financial Rewards construct is positioned as a Higher-Order Construct (HOC) formed by four Lower-Order Constructs (LOCs): Recognition and Appreciation, Career Development Opportunity, Work Flexibility, and Supportive Work Environment.

The selection of these four dimensions is based on contemporary human resource management literature demonstrating that modern non-financial reward systems are not limited to a single form of appreciation but encompass various psychological work experiences that enhance employee motivation and engagement (Forner et al., 2021; Ce et al., 2025). Recognition and appreciation represent social appreciation for individual contributions, career development opportunities reflect opportunities for competency enhancement and professional growth, work flexibility relates to freedom and work-life balance, while supportive work environments reflect the quality of social relationships and organizational support in the workplace. The four dimensions are employed as formative constructs toward Non-Financial Rewards because each dimension represents different aspects that cannot substitute for one another in forming the overall concept of non-financial rewards. In a formative model, changes in one dimension will affect the meaning of the primary construct as a whole (Hair et al., 2019). For example, an organization may have high work flexibility but may not necessarily provide good recognition to employees. Conversely, another organization may offer strong career development opportunities but have a less supportive work environment. Therefore, each dimension provides a unique contribution to forming the non-financial reward system.

Meanwhile, indicators within each dimension are treated as reflective indicators because measurement items are viewed as manifestations of the same latent construct. For example, indicators such

as providing praise, appreciation for contributions, and recognition from supervisors are viewed as reflections of the Recognition and Appreciation construct. Thus, this study employs a Reflective-Formative Hierarchical Component Model approach, where indicators reflect Lower-Order Constructs, while Lower-Order Constructs collectively form the Higher-Order Construct of Non-Financial Rewards.

2.7. The Influence of Non-Financial Rewards on Employee Motivation

Non-financial rewards are forms of non-cash appreciation provided by organizations to enhance employees' work experiences, psychological satisfaction, and organizational engagement. In modern work environments, organizations not only rely on financial compensation to maintain work motivation but also attend to employees' psychological needs through various forms of non-financial appreciation such as recognition, career development, work flexibility, and supportive work environments. Based on Self-Determination Theory (SDT), intrinsic motivation increases when individuals' basic psychological needs for autonomy, competence, and relatedness are fulfilled (Deci & Ryan, 2000). Non-financial rewards are perceived as capable of fulfilling these needs through providing work freedom, opportunities for growth, appreciation for individual contributions, and social support within the organization. When these psychological needs are fulfilled, employees tend to demonstrate higher work motivation, stronger work engagement, and better organizational commitment.

Furthermore, the Job Demands-Resources (JD-R) Model explains that job resources such as organizational support, work flexibility, and self-development opportunities can enhance individual work motivation and help employees cope with work demands more effectively (Ce et al., 2025). In this study, non-financial reward dimensions are understood as forms of job resources that support employees' psychological well-being and intrinsic motivation. Previous research demonstrates that non-financial rewards positively influence work motivation. Hidayat and Heryjanto (2024) found that career development opportunities enhance work motivation by providing professional growth opportunities for individuals. Mandasari and Irawanto (2024) demonstrated that work flexibility positively influences employee motivation and job satisfaction. Additionally, Agus (2024) and Suciyono et al. (2025) found that organizational recognition and supportive work environments enhance intrinsic motivation and employee loyalty.

Based on these theoretical explanations and prior research findings, the following hypothesis is formulated:

H1: Non-Financial Rewards have a positive influence on Employee Motivation.

2.8. Dimensional Relationships to Non-Financial Rewards Construct

In this study, Non-Financial Rewards are positioned as a Higher-Order Construct (HOC) formed by four Lower-Order Constructs (LOCs): Recognition and Appreciation, Career Development Opportunity, Work Flexibility, and Supportive Work Environment. These four dimensions are treated as formative constructs because each dimension represents different aspects that cannot substitute for one another in forming the overall concept of non-financial rewards. According to Hair et al. (2019), formative relationships occur when indicators or constituent dimensions collectively form a primary construct. In a formative model, changes in one dimension will affect the meaning of the construct as a whole. Therefore, the presence of each dimension in this study is considered important in comprehensively representing the concept of Non-Financial Rewards. The Recognition and Appreciation dimension represents social appreciation for individual contributions and achievements within the organization. Career Development Opportunity reflects organizational support for competency enhancement and professional growth of employees. Work Flexibility describes the level of autonomy provided by the organization to individuals in performing their work. Meanwhile, Supportive Work Environment represents the quality of social support and interpersonal relationships within the organization.

These four dimensions were selected based on contemporary human resource management literature demonstrating that modern non-financial reward systems are multidimensional and consist of various complementary psychological work experiences (Forner et al., 2021; Ce et al., 2025). Thus, each dimension is viewed as providing a unique contribution to forming the non-financial Rewards construct.

Based on this argumentation, the following hypotheses are formulated:

H2: Recognition and Appreciation contribute to the formation of Non-Financial Rewards.

H3: Career Development Opportunity contributes to the formation of Non-Financial Rewards.

H4: Work Flexibility contributes to the formation of Non-Financial Rewards.

H5: Supportive Work Environment contributes to the formation of Non-Financial Rewards.

2.9. Conceptual Framework

Based on the theoretical foundations and previous research, this study employs a Reflective-Formative Hierarchical Component Model (HCM) approach in SEM-PLS. Non-Financial Rewards are positioned as a Higher-Order Construct (HOC) formed by four Lower-Order Constructs (LOCs): Recognition and Appreciation, Career Development Opportunity, Work Flexibility, and Supportive Work Environment. Subsequently, the Non-Financial Rewards construct is tested for its influence on Employee Motivation as the dependent variable. In this model, indicators reflect each Lower-Order Construct (reflective measurement), while Lower-Order Constructs collectively form the Higher-Order Construct of Non-Financial Rewards (formative measurement). The primary structural relationship is tested between the Higher-Order Construct of Non-Financial Rewards and Employee Motivation, while the relationships between Lower-Order Constructs and the Higher-Order Construct serve as the formative measurement model.

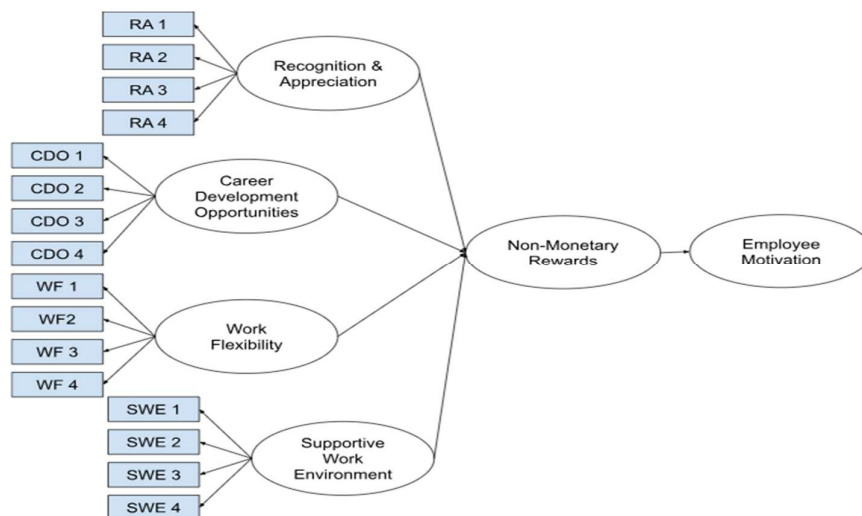


Figure 1. Conceptual Framework

III. Research Method

3.1. Research Design

This study employs a quantitative approach with a survey method to examine the influence of Non-Financial Rewards on Employee Motivation. The quantitative approach was selected because the study aims to objectively test relationships among constructs through numerical data-based statistical analysis. The

research method employed is explanatory research, as this study aims to explain causal relationships among variables based on theory and previous research. The study was conducted cross-sectionally, meaning data were collected within a specific time period through questionnaire distribution to respondents. Data analysis was conducted using Structural Equation Modeling-Partial Least Squares (SEM-PLS) with the assistance of SmartPLS software (Ringle et al., 2022). The SEM-PLS approach was selected because the study employs a multidimensional construct with a Reflective-Formative Hierarchical Component Model (HCM). In this study, Non-Financial Rewards are positioned as a Higher-Order Construct (HOC) formed by four Lower-Order Constructs (LOCs): Recognition and Appreciation, Career Development Opportunity, Work Flexibility, and Supportive Work Environment.

In this research model, indicators reflect each Lower-Order Construct (reflective measurement), while Lower-Order Constructs collectively form the Higher-Order Construct of Non-Financial Rewards (formative measurement). The primary structural relationship is tested between the Higher-Order Construct of Non-Financial Rewards and Employee Motivation, while the relationships between Lower-Order Constructs and the Higher-Order Construct serve as the formative measurement model. Model analysis was conducted using the Extended Two-Stage Approach in SmartPLS, as recommended by Hair et al. (2019) and Afthanorhan (2014) for Reflective-Formative HCM models, as it produces more stable parameter estimates compared to the repeated indicators approach.

3.2. Population

The population of this study consists of employees working in companies or organizations that implement non-financial reward systems in the Indonesian workplace. The population was selected because the study focuses on employees' perceptions of non-financial reward practices and their influence on work motivation.

3.3. Sample

The sampling technique employed is non-probability sampling with a purposive sampling method. Respondent criteria include:

- a. Minimum age of 18 years
- b. Minimum work experience of 1 year
- c. Active employee status
- d. Has received some form of non-financial reward at the workplace

This technique was selected because the study requires respondents with work experience who can adequately assess reward systems and work environments. Sample size determination follows Hair et al.'s (2019) guideline of a minimum of 5–10 times the number of indicators in the model. Number of research indicators:

- a. Section B (Non-financial rewards): 4 dimensions $\times$ 4 items = 16 indicators
- b. Section C (Employee motivation): 8 indicators
- c. Total indicators = 24 indicators

Minimum sample required: $24 \times 5 = 120$ respondents. Therefore, this study established a minimum target of ≥ 125 respondents. The study successfully collected data from 162 respondents, exceeding the minimum requirement.

3.4. Data Collection Technique

Data were collected online using a self-administered questionnaire method. Prior to completion, respondents were provided with an informed consent form explaining the research purpose, data confidentiality, and their right to withdraw participation at any time. The questionnaire was developed based on indicators for each research construct and utilized a Likert scale. Prior to the main data collection, this study conducted a pilot study using the first 52 respondents who met the sample criteria. The pilot study results were used to evaluate instrument quality through analysis of outer loading, Average Variance Extracted (AVE), and initial reliability using SmartPLS 4 with the PLS Algorithm approach (path weighting scheme, initial weight +1). Since the independent and dependent variables in this study were measured using the same instrument from the same source at the same time, there is potential for Common Method Bias (CMB) that could artificially inflate correlations among variables (Podsakoff et al., 2003). Several mitigation measures were implemented. Procedurally, each construct included reverse-coded items to reduce artificially consistent response tendencies. Additionally, the informed consent did not explicitly state that the research focuses on the relationship between non-financial rewards and employee motivation to avoid priming respondents.

3.5. Data Analysis Technique

Data analysis in this study was conducted using Structural Equation Modelling based on Partial Least Squares (SEM-PLS) with SmartPLS software (Ringle et al., 2022). This study employs a Reflective-Formative Hierarchical Component Model (HCM) with the Extended Two-Stage Approach. The two-stage approach in second-order construct models is considered capable of producing more stable parameter estimates for multidimensional constructs (Afthanorhan, 2014). Analysis was conducted through two main stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model). The outer model evaluation was conducted to test the validity and reliability of research constructs, while the inner model evaluation was conducted to test relationships among constructs and hypothesis testing. For reflective constructs, evaluation was conducted through testing outer loadings, Average Variance Extracted (AVE), Composite Reliability, Cronbach's Alpha, and discriminant validity (Fornell & Larcker, 1981; Henseler et al., 2015). Meanwhile, formative construct evaluation was conducted through testing outer weights, bootstrapping significance, and Variance Inflation Factor (VIF) (Hair et al., 2019). Hypothesis testing was conducted using the bootstrapping procedure in SmartPLS to test the significance of relationships among research constructs.

IV. Result and Discussion

4.1. Measurement Model Development Process

Prior to the main data collection, this study conducted a pilot study using 52 respondents who met the sample criteria. The pilot study aimed to evaluate instrument quality through analysis of outer loading, Average Variance Extracted (AVE), and initial reliability using SmartPLS 4 with the PLS Algorithm approach (path weighting scheme, initial weight +1). Initial analysis results showed that the five reverse-coded items (RA4, CDO4, WF4, SWE4, and EM7) produced very low or negative outer loadings (RA4 = -0.012; CDO4 = -0.601; WF4 = 0.036; SWE4 = 0.036; EM7 = -0.092), with item-total correlations below 0.30. These findings indicated that reverse-coded items did not consistently reflect the same construct as other items. After eliminating reverse-coded items, further evaluation of outer loadings and AVE in the pilot study revealed that several additional indicators had low loadings: CDO1 (0.511), WF1 (0.178), and EM6 (0.387). Based on Hair et al.'s (2019) criteria, these three items were eliminated from the measurement model because their removal significantly improved the AVE of their respective constructs.

In the main data analysis phase (n=162), further evaluation indicated that several indicators still had outer loadings below 0.70. Items EM2 (0.629) and EM3 (0.656) were eliminated because their removal increased the Employee Motivation construct AVE from 0.488 to 0.555. Additionally, item RA2 (0.493) was eliminated due to its outer loading falling below 0.50. This removal left two indicators for the RA construct (RA1 and RA3), which still satisfied the minimum indicator requirement for reflective constructs (Hair et al., 2019), while increasing the Recognition and Appreciation AVE from 0.541 to 0.710. A more significant finding in the main data analysis was the low internal consistency of the Work Flexibility (WF) construct. Although WF2 and WF3 each demonstrated adequate outer loadings (0.768 and 0.717), the inter-item correlation calculation indicated a very low value ($r = 0.10$). This value produced a Cronbach's Alpha of 0.189, far below acceptable limits. Further analysis confirmed that the low inter-item correlation was not merely a mathematical artifact of a two-indicator construct but reflected a fundamental internal consistency problem. Conceptually, WF2 measures work-life balance (organization enables balance between work and personal life), while WF3 measures autonomy in work methods (freedom to determine how to complete work). These two aspects appear to be perceived by respondents as different dimensions, although theoretically both fall under the concept of work flexibility. The final measurement model consisted of 11 indicators distributed across four constructs: Recognition and Appreciation (RA1, RA3), Career Development Opportunity (CDO2, CDO3), Supportive Work Environment (SWE1, SWE2, SWE3), and Employee Motivation (EM1, EM4, EM5, EM8). Evaluation of the final measurement model with the full sample (n=162) showed that all constructs met convergent validity criteria with AVE values ranging from 0.541 to 0.712, and Composite Reliability (Rho_C) values ranging from 0.778 to 0.833, both exceeding recommended thresholds (Hair et al., 2019).

4.2. Respondent Characteristics

This study involved 162 respondents who were active employees with a minimum of one year of work experience and who had received some form of non-financial reward in the workplace. Data were collected through online self-administered questionnaires using purposive sampling. Respondent characteristics are presented in Table 1.

Table 1. Respondent Characteristics (N = 162)

Characteristic	Category	Frequency	Percentage
Age	18-24 Years	122	75.3%
	25-34 Years	37	22.8%
	35-44 Years	2	1.2%
	> 44 Years	1	0.6%
Gender	Male	59	36.4%
	Female	97	59.9%
	Prefer not to say	6	3.7%
Work Experience	1-3 years	139	85.8%
	4-6 years	16	9.9%
	> 6 years	7	4.3%
Work Location	Jakarta	67	41.4%
	Bekasi	19	11.7%
	Tangerang	11	6.8%
	Outside Jabodetabek	49	30.2%
	Others	16	9.9%

Based on Table 1, the majority of respondents were aged 18-24 years (75.3%), female (59.9%), and had 1-3 years of work experience (85.8%). These characteristics indicate that respondents were predominantly

young employees with early to mid-career work experience, which is relevant to the research focus on perceptions of non-financial rewards in modern work environments.

4.3. Evaluation of the Measurement Model (Outer Model)

a. Convergent Validity

Convergent validity was tested through Average Variance Extracted (AVE) and outer loadings. According to Hair et al. (2019), the recommended AVE value is ≥ 0.50 , while the ideal outer loading is ≥ 0.70 .

Table 2. Outer Loadings and AVE of Research Constructs

Construct	Indicator	Outer Loading	AVE	Status
CDO	CDO2	0.895	0.712	Valid
	CDO3	0.789		Valid
EM	EM1	0.716	0.555	Valid
	EM4	0.754		Valid
	EM5	0.780		Valid
	EM8	0.728		Valid
RA	RA1	0.902	0.710	Valid
	RA3	0.779		Valid
SWE	SWE1	0.736	0.541	Valid
	SWE2	0.802		Valid
	SWE3	0.662		Valid

Based on Table 2, all indicators have outer loadings above 0.60 and most above 0.70. AVE values for all constructs range from 0.541 to 0.712, all exceeding the 0.50 threshold (Hair et al., 2019). Thus, all constructs in this study meet convergent validity criteria.

b. Reliability Evaluation

Construct reliability was tested using three criteria: Cronbach's Alpha, Composite Reliability (ρ_a), and Composite Reliability (ρ_c). According to Hair et al. (2019), the recommended Composite Reliability (ρ_c) value is ≥ 0.70 .

Table 3. Reliability Test Results

Construct	Cronbach's Alpha	ρ_a	ρ_c	Status
CDO	0.604	0.645	0.831	Reliable
EM	0.733	0.739	0.833	Reliable
RA	0.604	0.660	0.830	Reliable
SWE	0.573	0.573	0.778	Reliable

Based on Table 3, all constructs have Composite Reliability (ρ_c) values above 0.70, ranging from 0.778 to 0.833. Although Cronbach's Alpha values for CDO (0.604), RA (0.604), and SWE (0.573) are below or near 0.70, Hair et al. (2019) state that in the PLS-SEM, Composite Reliability (ρ_c) is a more appropriate reliability indicator than Cronbach's Alpha, particularly for constructs with a limited number of indicators. The low Cronbach's Alpha values for CDO and RA are primarily due to the limited number of indicators (two indicators), which mathematically produces lower Alpha estimates. Meanwhile, SWE (0.573) has three indicators but its Alpha remains below 0.60, likely due to variation in responses to SWE3 (0.662) compared to SWE1 (0.736) and SWE2 (0.802). Thus, based on Composite Reliability (ρ_c) criteria, all constructs in this research model are declared reliable.

c. Discriminant Validity

Discriminant validity was tested using two approaches: Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT).

1) Fornell-Larcker Criterion

According to Fornell and Larcker (1981), discriminant validity is established when the square root of AVE for each construct is greater than its correlations with other constructs.

Table 4. Fornell-Larcker Criterion

Construct	CDO	EM	RA	SWE
CDO	0.844			
EM	0.477	0.745		
RA	0.640	0.566	0.843	
SWE	0.444	0.455	0.494	0.736

Based on Table 4, the square root of AVE for each construct (diagonal values) is greater than its correlations with other constructs (values below the diagonal). Thus, all constructs meet the Fornell-Larcker Criterion, indicating adequate discriminant validity.

2) Heterotrait-Monotrait Ratio (HTMT)

According to Henseler et al. (2015), the recommended HTMT threshold is < 0.90 (or ideally < 0.85).

Table 5. Heterotrait-Monotrait Ratio (HTMT)

Construct Pair	HTMT	Threshold	Status
EM ↔ CDO	0.699	< 0.90	Valid
RA ↔ CDO	1.033	< 0.90	Not Valid
RA ↔ EM	0.826	< 0.90	Valid
SWE ↔ CDO	0.737	< 0.90	Valid
SWE ↔ EM	0.684	< 0.90	Valid
SWE ↔ RA	0.825	< 0.90	Valid

Based on Table 5, the majority of construct pairs have HTMT values below 0.90. However, the RA ↔ CDO pair produced an HTMT value of 1.033, exceeding the 0.90 threshold (Henseler et al., 2015). This indicates conceptual overlap between Recognition and Appreciation (RA) and Career Development Opportunity (CDO). This conceptual overlap likely reflects respondents' perception of both dimensions as interrelated forms of organizational appreciation. Theoretically, based on Self-Determination Theory (Deci & Ryan, 2000), both dimensions contribute to fulfilling the psychological need for competence, so the high correlation reflects theoretically interrelated relationships rather than merely instrument weakness. This limitation is acknowledged as part of the research findings and serves as a recommendation for future research to develop indicators that can better empirically distinguish the two constructs.

4.4. Evaluation of the Structural Model (Inner Model)

a. Higher-Order Construct Evaluation

This study employed the Extended Two-Stage Approach (Hair et al., 2019; Afthanorhan, 2014) to evaluate the Reflective-Formative HCM model. In the first stage, latent variable scores from each LOC were extracted. In the second stage, these scores were used as formative indicators to form the HOC construct of Non-Financial Rewards (NFR).

Table 6. Outer Weights and VIF of Formative HOC Construct

Dimension	Outer Weight	T-Statistic	P-Value	VIF	Status
RA → NFR	0.601	3.717	0.000	1.866	Significant
SWE → NFR	0.338	2.513	0.012	1.373	Significant
CDO → NFR	0.246	1.660	0.097	1.757	Not Significant

Based on Table 6, two of the three dimensions forming Non-Financial Rewards have significant contributions: Recognition and Appreciation (RA) with weight 0.601 ($p = 0.000$) and Supportive Work Environment (SWE) with weight 0.338 ($p = 0.012$). Meanwhile, Career Development Opportunity (CDO) has weight 0.246 ($p = 0.097$), which is not statistically significant. All VIF values are below 5.0, indicating no multicollinearity issues among dimensions.

b. Coefficient of Determination (R^2)

The coefficient of determination (R^2) is used to measure the extent to which the independent variable explains the variance in the dependent variable. According to Hair et al. (2019), R^2 values are categorized as follows: > 0.75 (substantial), $0.50-0.75$ (moderate), $0.25-0.50$ (weak), and < 0.25 (very weak).

Table 7. R^2 and R^2 Adjusted Values

Variable	R^2	R^2 Adjusted	Status
Employee Motivation (EM)	0.374	0.370	Weak (acceptable)

Based on Table 7, the R^2 value for Employee Motivation (EM) is 0.374, meaning Non-Financial Rewards (NFR) explain 37.4% of the variance in employee motivation. The R^2 Adjusted value of 0.370 confirms model stability. Although classified as weak ($0.25-0.50$), this value is still acceptable in exploratory social science research, particularly when explaining complex human behavior such as motivation (Hair et al., 2019).

c. Predictive Relevance (Q^2)

Predictive relevance was tested using the PLSpredict method to assess the model's ability to predict new data. According to Hair et al. (2019), a Q^2 value > 0.00 indicates that the model has predictive relevance.

Table 8. Q^2 predict Values

Indicator	Q^2 predict	Threshold	Status
EM1	0.173	> 0	Has predictive relevance
EM4	0.174	> 0	Has predictive relevance
EM5	0.246	> 0	Has predictive relevance
EM8	0.141	> 0	Has predictive relevance

Based on Table 8, all Employee Motivation indicators have positive Q^2 predict values, ranging from 0.141 to 0.246. This indicates that the research model has adequate predictive relevance, meaning the model can predict employee motivation in new data beyond the research sample (Hair et al., 2019; Shmueli et al., 2019).

d. Effect Size (f^2)

Effect size (f^2) is used to measure the practical contribution of the independent variable to the dependent variable. According to Cohen (1988), f^2 values are categorized as: > 0.35 (large effect), $0.15-0.35$ (medium effect), $0.02-0.15$ (small effect), and < 0.02 (negligible effect).

Table 9. f^2 Values (Effect Size)

Relationship	f^2	Category
NFR → EM	0.597	Large Effect

Based on Table 9, the f^2 value for the influence of Non-Financial Rewards (NFR) on Employee Motivation (EM) is 0.597, classified as large effect (> 0.35) according to Cohen's (1988) criteria. This finding indicates that Non-Financial Rewards have a very strong practical contribution in explaining employee motivation, not merely statistical significance.

V. Conclusion

This study aimed to examine the influence of Non-Financial Rewards on Employee Motivation using a Reflective-Formative Hierarchical Component Model (HCM) approach. Based on the analysis of data collected from 162 active employees in Indonesia, the following conclusions can be drawn First, Non-Financial Rewards have a positive and significant influence on Employee Motivation ($H1: \beta = 0.611; t = 15.070; p = 0.000$). This finding confirms that non-financial reward systems comprising Recognition and Appreciation, Career Development Opportunity, and Supportive Work Environment collectively enhance employees' intrinsic motivation. The large effect size ($f^2 = 0.597$) indicates that this influence is not only statistically significant but also practically meaningful. Second, Recognition and Appreciation (RA) significantly contribute to the formation of Non-Financial Rewards ($H2: \text{weight} = 0.601; p = 0.000$). This dimension emerged as the strongest contributor, suggesting that in Indonesian workplace, being recognized and appreciated by supervisors and peers is the most valued form of non-financial reward. Third, Career Development Opportunity (CDO) does not significantly contribute to Non-Financial Rewards ($H3: \text{weight} = 0.246; p = 0.097$). This finding may be attributed to conceptual overlap with Recognition and Appreciation ($HTMT = 1.033$), the predominantly young sample characteristics (75.3% aged 18-24 years), and limited indicators for the CDO construct. Fourth, Supportive Work Environment (SWE) significantly contributes to the formation of Non-Financial Rewards ($H5: \text{weight} = 0.338; p = 0.012$). This indicates that employees highly value inclusive work environments, positive interpersonal relationships, and support from colleagues and supervisors. Fifth, Work Flexibility (WF) was excluded from the model due to poor internal consistency (Cronbach's Alpha = 0.189) and low inter-item correlation ($r = 0.10$), indicating that work-life balance and autonomy in work methods are perceived as distinct dimensions by respondents. The model explains 37.4% of the variance in employee motivation ($R^2 = 0.374$) and demonstrates adequate predictive relevance ($Q^2_{\text{predict}} = 0.141-0.246$).

This study makes several theoretical contributions to the literature on non-financial rewards and employee motivation. First, the study empirically validates the application of Self-Determination Theory (Deci & Ryan, 2000) in explaining how non-financial rewards collectively fulfill the basic psychological needs of autonomy, competence, and relatedness. By conceptualizing non-financial rewards as a multidimensional higher-order construct, this study demonstrates that the synergistic effect of multiple reward dimensions is more meaningful than individual dimensions in isolation. Second, the findings extend Herzberg's Two-Factor Theory (Herzberg et al., 1959) by demonstrating that recognition and appreciation function as powerful motivator factors in the Indonesian workplace. The strong contribution of Recognition and Appreciation ($\text{weight} = 0.601$) confirms that social appreciation serves as a primary driver of employee motivation. Third, this study contributes to the Job Demands-Resources (JD-R) Model (Bakker & Demerouti, 2007) by empirically demonstrating that supportive work environments function as critical job resources that enhance employee motivation and well-being. Fourth, the methodological contribution of this study lies in the successful application of the Reflective-Formative Hierarchical Component Model (HCM) approach to conceptualize non-financial rewards as a multidimensional formative construct. This approach provides a more comprehensive understanding of how individual dimensions uniquely contribute to the overall construct.

The findings of this study offer several practical implications for organizations seeking to enhance employee motivation through non-financial reward systems. First, organizations should prioritize Recognition

and Appreciation as the most influential dimension of non-financial rewards. This can be implemented through regular acknowledgment of employee achievements, public recognition programs, appreciation from supervisors, and peer-to-peer recognition systems. Second, organizations should invest in creating Supportive Work Environments by fostering inclusive workplace cultures, encouraging positive interpersonal relationships, and ensuring supervisors are approachable and supportive. This includes promoting teamwork, open communication, and mutual respect among colleagues. Third, although Career Development Opportunity did not significantly contribute to non-financial rewards in this study, organizations should not neglect career development initiatives, particularly for young employees who may value long-term growth opportunities. Organizations should consider integrating career development programs with recognition systems to enhance their perceived value. Fourth, organizations should carefully design work flexibility programs, recognizing that work-life balance and autonomy in work methods may be perceived as distinct dimensions requiring separate consideration.

This study has several limitations that should be acknowledged and addressed in future research. First, the sample was predominantly composed of young employees (75.3% aged 18-24 years) with limited work experience (85.8% with 1-3 years). This limits the generalizability of findings to more experienced employees or different demographic groups. Future research should employ more diverse samples across age groups, experience levels, and industries. Second, the cross-sectional design precludes causal inferences. Future research should employ longitudinal designs to examine how non-financial rewards influence employee motivation over time. Third, the Work Flexibility construct was excluded from the model due to poor reliability, suggesting that the conceptualization and measurement of work flexibility in Indonesia require further refinement. Future research should develop more comprehensive measures of work flexibility that distinguish between work-life balance, autonomy in work methods, and flexibility in work arrangements. Fourth, the conceptual overlap between Recognition & Appreciation and Career Development Opportunity ($HTMT = 1.033$) indicates that these dimensions may be perceived as similar constructs by Indonesian employees. Future research should develop indicators that more effectively distinguish between these dimensions or consider merging them into a single construct. Fifth, this study focused exclusively on non-financial rewards as predictors of employee motivation. Future research should examine potential mediating mechanisms, such as intrinsic motivation, and moderating factors, such as organizational culture or individual differences.

References

- Afthanorhan, W. (2014). Hierarchical component using reflective-formative measurement model in partial least square structural equation modeling (PLS-SEM). *International Journal of Mathematics*, 2, 33-49.
- Agus. (2024). The influence of social support and achievement recognition on employee job satisfaction. *Jurnal Bisnis Dan Kewirausahaan*, 1(1), 52-58. <https://journal.iconpublisherindonesia.com/index.php/jbk/article/view/8>
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. <https://doi.org/10.1108/02683940710733115>
- Ce, Z., Ab-Rahim, R., Siali, F., & Mokhtar, N. (2025). Employee motivation and job performance of non-academic staff in Chinese universities. *Societies*, 15(8), 227. <https://doi.org/10.3390/soc15080227>
- ci, 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/S15327965PL11104_01
- Forner, V. W., Jones, M., Berry, Y., & Eidenfalk, J. (2021). Motivating workers: How leaders apply self-determination theory in organizations. *Organization Management Journal*, 18(2), 76-94. <https://doi.org/10.1108/OMJ-03-2020-0891>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>

- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Sage Publications.
- 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>
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). The motivation to work. John Wiley & Sons.
- Hidayat, R., & Heryjanto, A. (2024). The influence of career development, work environment, and rewards on employee performance mediated by work motivation. *Devotion: Journal of Research and Community Service*, 4(2), 1062-1080. <https://devotion.greenvest.co.id/index.php/dev/article/view/784>
- Irwan, A., Anwar, V., & Zaitun, C. (2025). More than a paycheck: How non-financial incentives shape employee motivation in public administration. *Asian Management and Business Review*, 5(1), 178-195. <https://doi.org/10.20885/AMBR.vol5.iss1.art12>
- Mandasari, R. A., & Irawanto, D. W. (2024). Pengaruh employee engagement dan work-life balance terhadap kepuasan kerja karyawan. *Jurnal Kewirausahaan dan Inovasi*, 2(4), 1004-1015. <https://doi.org/10.21776/jki.2023.02.4.06>
- Manzoor, F., Wei, L., & Asif, M. (2021). Intrinsic rewards and employee performance with the mediating mechanism of employee motivation. *Frontiers in Psychology*, 12, 563070. <https://doi.org/10.3389/fpsyg.2021.563070>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. <https://doi.org/10.1037/h0054346>
- Mustafa, G., & Ali, N. (2019). Rewards, autonomous motivation and turnover intention: Results from a non-Western cultural context. *Cogent Business & Management*, 6(1). <https://doi.org/10.1080/23311975.2019.1676090>
- 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>
- Ringle, C. M., Wende, S., & Becker, J.-M. (2022). SmartPLS 4. SmartPLS GmbH.
- Suciyono, G. P., Wahyu Aji, D. P., & Nurdiana, E. (2025). Evaluation of awards and recognition programs in increasing employee motivation in companies. *Siber International Journal of Digital Business*, 3(1), 53-60. <https://doi.org/10.38035/sijdb.v3i1.272>
- Triaji, E., & Maharani Putri, N. (2024). The influence of indirect compensation and intrinsic motivation on employee productivity (Case study: PT. Primarindo Asia Infrastructure Tbk Bandung). *Jurnal Dialektika: Jurnal Ilmu Sosial*, 22(3), 47-64. <https://doi.org/10.63309/dialektika.v22i3.358>