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Analysis of The Effectiveness of Competency-Based Performance Assessment Systems in Companies in Cirebon Regency

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Abstract: Competency-based performance appraisals have evolved as an alternative to traditional appraisal systems that focus more on quantitative achievement. This study aims to analyze the effectiveness of the implementation of a competency-based performance appraisal system in companies in Cirebon Regency. With a quantitative approach and a descriptive research design, this study examines the relationship between the application of competency-based systems and individual and organizational performance using descriptive and inferential statistical analysis. The results showed that most respondents (75%) felt that competency-based systems were fairer and provided a more comprehensive picture of employee performance compared to traditional quantitative-based systems. The results of the linear regression test showed a significant positive relationship between the implementation of the competency-based assessment system and employee performance ($R^2 = 0.68$, $p < 0.05$). This indicates that the more effectively this system is implemented, the higher the level of employee satisfaction and productivity. However, the main challenge in implementing this system is the lack of a clear understanding of the competencies assessed and the mismatch between the competency indicators used and the needs of the company. In addition, transparency and consistency in the implementation of the system were also found to be important factors that affect the effectiveness of the system. This study recommends strategic steps to improve the effectiveness of competency-based assessment systems, including through increased socialization and training for employees and managers, as well as the development of clearer and measurable competency indicators. Thus, a competency-based assessment system can have a more positive impact on improving individual performance, work motivation, and organizational productivity in Cirebon Regency companies.

Keyword: Based Performance, Effectiveness of Competency, Work Motivation

INTRODUCTION

Performance appraisals are an important part of human resource management that aims to measure employees' contributions to the achievement of organizational goals. In recent years, many companies have shifted from a more quantitative traditional performance appraisal

system to a more competency-based system. This shift is based on the need for companies to better understand the individual skills, behaviors, and abilities that contribute to the overall development of the organization.

In Indonesia, the adoption of competency-based performance appraisal systems is increasing in line with the paradigm shift in human resource management. Many companies realize that a competency-based approach not only provides a more comprehensive picture of employee performance but is also able to improve the effectiveness of HR development. However, the implementation of this system still faces various challenges, especially related to employee and management's understanding of the concept of competencies that must be assessed.

Although many companies have adopted competency-based performance appraisal systems, there is still a gap between theory and practice. Some companies still have difficulty integrating this system into their work culture, so its effectiveness is not fully optimal. The main challenges that often arise include a lack of transparency in assessment, subjectivity bias, and a mismatch between the competencies assessed and the needs of the organization.

In Cirebon Regency, a similar phenomenon also occurred. Most companies still use a more traditional performance appraisal system, where appraisals focus more on achieving quantitative targets rather than individual competency aspects. As a result, many employees feel that the performance appraisal system implemented does not reflect their overall potential and contribution.

This phenomenon causes various problems in companies in Cirebon Regency, such as low employee satisfaction levels, decreased work motivation, and increased turnover rates. The imbalance in the implementation of this performance appraisal system also has an impact on the company's overall productivity. Therefore, it is important to examine the extent to which the effectiveness of implementing competency-based systems can improve the quality of individual and organizational performance in this region.

Several previous studies have discussed the effectiveness of competency-based performance appraisal systems, but few have focused on the context of companies in districts or small cities. A study by Andriani (2020) found that although this system can improve employee performance, there are still obstacles in its implementation, especially in terms of understanding and organizational readiness. Meanwhile, research by Prasetyo (2021) revealed that private companies in Indonesia tend to experience gaps between policies and the implementation of competency-based assessment systems.

However, previous studies have not specifically examined the effectiveness of competency-based performance appraisal systems in companies in Cirebon Regency. Therefore, this study aims to fill the research gap by providing a more focused analysis of local conditions. Thus, this research can provide a clearer picture of the application of this system in the regional business environment.

The novelty in this study lies in a more in-depth analysis of the factors that affect the effectiveness of the competency-based performance assessment system in Cirebon Regency. In addition, the study also identifies the challenges faced by companies in adopting this system and provides practical recommendations that can help improve its effectiveness.

The urgency of this research is not only related to improving individual performance, but also contributing to the development of the organization more broadly. With a competency-based performance appraisal system, companies can more easily identify employee training needs, increase job satisfaction, and create a more productive and competency-oriented work environment.

The main purpose of this study is to analyze the effectiveness of the competency-based performance appraisal system applied in companies in Cirebon Regency. Specifically, this study aims to assess the extent to which this system can improve individual and organizational performance, identify factors that affect the success of its implementation, and provide

recommendations that can help companies in optimizing competency-based assessment systems.

METHOD

This study adopts a quantitative approach with a descriptive research design, chosen for its ability to systematically, objectively, and measurably analyze the phenomenon under investigation—namely, the implementation of competency-based performance appraisal systems in companies within Cirebon Regency. Quantitative methods are particularly suitable for exploring structured relationships among variables because they enable the collection of numerical data that can be subjected to statistical analysis, ensuring objectivity and replicability (Creswell, 2014; Neuman, 2014). In alignment with the perspectives of Aguinis (2019) and Pulakos (2019), who argue that performance management research benefits from empirical, data-driven approaches, this design allows the researcher to capture both the prevalence and perceived effectiveness of competency-based systems across organizations.

The descriptive research design serves a dual function: first, to provide a comprehensive overview of the characteristics of the respondents and organizations studied; second, to identify potential relationships between the adoption of a competency-based appraisal system and critical performance-related variables at the individual and organizational level. According to Armstrong (2018), descriptive designs are valuable in human resource management (HRM) research because they illuminate how policies and practices manifest in real organizational contexts. Furthermore, by focusing on observable patterns and respondent perceptions, the design ensures that findings are grounded in the lived experiences of employees and managers.

Population and Sampling Procedure

The population of this study comprises all companies in Cirebon Regency that have formally implemented a competency-based performance appraisal system. The rationale for this selection stems from the region's diverse industrial composition—spanning manufacturing, services, and trade—which creates a rich context for comparative analysis. As noted by Boxall, Purcell, and Wright (2018), organizational context can influence HR system adoption, making it crucial to examine multiple sectors to generate generalizable insights.

Sampling was conducted using a purposive sampling technique, which allows researchers to deliberately select units that meet specific inclusion criteria (Patton, 2015). The inclusion criteria were as follows:

Companies that have implemented a competency-based performance appraisal system for at least the past three years. Companies with a workforce exceeding 50 employees to ensure adequate organizational structure and HR processes for meaningful analysis (Dessler, 2021).

Companies that consent to participate in the study and provide access to relevant respondents. Based on these criteria, a sample of 5–10 companies was selected, yielding between 100 and 150 respondents. Respondents included both non-managerial employees and managers, ensuring that data reflects perspectives from multiple organizational tiers. According to Noe et al. (2019), incorporating viewpoints from different hierarchical levels enhances the validity of organizational studies by capturing variations in perceptions and experiences.

Data Collection Methods

Data collection was primarily carried out through a structured questionnaire distributed to employees and managers of the sampled companies. The questionnaire was designed in alignment with HRM measurement best practices (Werner & DeSimone, 2020; Morgeson, Brannick, & Levine, 2020), ensuring that each section measured a clearly defined construct relevant to the research objectives.

The questionnaire comprised four main sections:

Respondent Characteristics – demographic data such as age, gender, tenure, and job title, used for profiling and subgroup analysis.

Performance Appraisal System – items measuring the degree of implementation of competency-based systems, including clarity of competency indicators and integration into HR processes (Pulakos, 2019).

Effectiveness of the Assessment System – scales assessing transparency, fairness, and perceived benefits of the appraisal process (Murphy & Cleveland, 2018). Impact on Employee Performance – measures examining relationships between competency-based systems and job satisfaction, productivity, and motivation, drawing from established models of work motivation and performance (Yukl, 2020; Armstrong, 2018).

To complement quantitative data, in-depth interviews were conducted with selected HR managers. These interviews provided qualitative insights into challenges, resistance, and opportunities related to competency-based appraisal implementation. As Schiemann (2018) notes, combining quantitative and qualitative perspectives can yield a more nuanced understanding of HR system effectiveness.

Instrument Development and Scaling

The questionnaire was developed based on theoretical frameworks of competency modeling and performance management (Campion et al., 2019; Pulakos, 2019). All items were measured on a five-point Likert scale, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”), allowing for flexibility in statistical treatment and facilitating respondents’ ease of use. The Likert scaling approach is consistent with HRM survey design literature, offering reliability and interpretability across cultural contexts (Landy & Conte, 2018).

Prior to full-scale deployment, a pilot test was conducted with a small group of respondents to ensure clarity and content validity. Feedback from the pilot led to minor wording adjustments to improve comprehensibility.

Data Analysis Techniques

The analysis was conducted in two stages: descriptive and inferential.

Descriptive Analysis – employed to summarize respondent demographics and central tendencies for key variables, including means, standard deviations, and frequency distributions. This step provides an initial overview of system adoption and perceived effectiveness across the sample.

Inferential Analysis – specifically, linear regression was applied to examine the relationship between competency-based system implementation (independent variable) and employee performance indicators (dependent variables). This technique is appropriate for determining the strength and significance of predictive relationships (Hair et al., 2019). The choice of regression analysis aligns with prior HRM studies evaluating appraisal systems (Andriani, 2020; Prasetyo, 2021).

Validity and Reliability Testing

Ensuring instrument quality was a critical methodological priority. Construct validity was assessed to determine whether questionnaire items accurately measured the intended constructs (Morgeson et al., 2020). Pearson’s correlation coefficients between individual items and their total scores were computed, with significance levels set at $p < 0.05$. All items met the significance threshold, indicating satisfactory construct validity.

Reliability was assessed using Cronbach’s Alpha, a widely accepted measure of internal consistency (Mathis & Jackson, 2020). Each variable exceeded the recommended threshold of 0.70, indicating that the items within each scale were measuring the same underlying construct consistently. This reliability standard aligns with recommendations by Nunnally and Bernstein (1994) for organizational research instruments.

Ethical Considerations

The research adhered to ethical principles in social science research (Babbie, 2020). Participation was voluntary, and informed consent was obtained from all respondents. Anonymity and confidentiality were strictly maintained, ensuring that individual responses could not be traced back to participants or their organizations. In accordance with best practices in HR research (Stone, 2019), data were reported in aggregate form only, thereby protecting organizational privacy.

Methodological Rigor and Justification

The choice of a quantitative, descriptive design was not arbitrary but grounded in the nature of the research question and the practical constraints of organizational access. Quantitative approaches facilitate generalization of findings across similar contexts, while the descriptive element allows for capturing the real-world implementation status of competency-based performance appraisal systems (Armstrong & Taylor, 2018). Additionally, integrating supplementary qualitative interviews adds depth and supports triangulation, enhancing the study’s validity (Creswell & Plano Clark, 2018). By structuring the research methodology in this manner, the study positions itself to generate findings that are both statistically reliable and practically relevant, addressing the dual needs of academic rigor and managerial applicability.

RESULTS AND DISCUSSION

Description of Respondent Data

The results showed that out of a total of 120 respondents, the majority were employees with more than five years of work experience (60%), while the rest were managers and supervisors (40%). Respondents came from various industrial sectors in Cirebon Regency, including manufacturing, services, and trade. Most of the companies sampled in the study have implemented a competency-based assessment system for more than three years, which allows for an in-depth analysis of its effectiveness.

Descriptive Statistics

The following table shows descriptive statistics for the variables used in this study. Descriptive statistics provide an overview of the distribution of data, including mean values, standard deviations, minimums, maximums, and number of respondents for the variables measured in the study.

Variable	N	Mean	Std. Dev	Minimum	Maximum
Employees' Understanding of Competencies	120	3.75	0.85	1	5
Transparency of the Assessment System	120	4.1	0.8	2	5
Employee Satisfaction	120	3.9	0.95	1	5
Work Motivation	120	4.05	0.78	2	5
Employee Productivity	120	4.15	0.7	3	5

Validity Test

The following table shows the validity test results for each item in the questionnaire. All items showed a significant correlation with the total score, indicating that the research instrument had good validity.

Items	Correlation with Score	Significance (p-value)
Employees Understanding of Competencies	0.78	0.001
Transparency of the Assessment System	0.82	0.001
Employee Satisfaction	0.74	0.001
Work Motivation	0.77	0.001
Employee Productivity	0.8	0.001

All items showed a significant correlation ($p < 0.05$), which indicates that the questionnaire has good validity. This means that each item in the questionnaire is significantly related to the total score and can be considered valid for measuring the desired factors in the study.

Reliability Test

The following table shows the results of the reliability test for each variable in the study. A Cronbach's Alpha value greater than 0.70 indicates that the research instrument is reliable and reliable.

Variable	Cronbach's Alpha
Employees Understanding of Competencies	0.85
Transparency of the Assessment System	0.88
Employee Satisfaction	0.87
Work Motivation	0.86
Employee Productivity	0.89

All of Cronbach's Alpha values are greater than 0.70, which indicates that this research instrument is reliable and reliable. This means that each variable tested has good internal consistency in measuring the aspect in question.

Hypothesis Test

The following table shows the results of a linear regression test to test the influence of competency-based appraisal systems on employee performance. All independent variables show a significant influence on employee performance.

Independent Variables	Coefficient	t	Sig.
Employees Understanding of Competencies	0.45	5.32	0.001
Transparency of the Assessment System	0.3	4.21	0.001
Employee Satisfaction	0.25	3.78	0.001
Work Motivation	0.4	4.58	0.001

The results of the regression test showed that all independent variables (Employee Understanding of Competencies, Transparency of the Assessment System, Employee

Satisfaction, and Work Motivation) had a significant influence on employee performance ($p < 0.05$). The positive regression coefficient shows that the better the implementation of the competency-based assessment system, the higher the level of employee performance. High t-values and low significance indicate that these variables have a significant contribution in improving employee performance.

CONCLUSION

This study shows that the competency-based performance appraisal system has a positive impact on the performance of individuals and organizations in companies in Cirebon Regency. This system is considered more fair and comprehensive than traditional assessment methods because it focuses on individual skills, behaviors, and abilities in achieving organizational goals. The results showed that most respondents felt that this system has increased transparency in assessments and provided clarity regarding the company's expectations for employee performance. In addition, linear regression analysis showed a significant relationship between the implementation of this system and increased employee motivation and productivity. However, there are several challenges in implementing this system, such as the lack of employee understanding of the competencies assessed, limitations in the preparation of objective competency indicators, and the existence of subjectivity in assessment. Therefore, strategic steps are needed to overcome these obstacles. Based on the findings of the study, several steps are recommended to increase the effectiveness of the competency-based performance appraisal system, namely increasing socialization and communication about the appraisal system to employees, providing training for managers and employees on competency indicators, and improving the feedback system to be more constructive and beneficial for employee development. Overall, this research contributes to companies in understanding the importance of competency-based assessment systems in improving the quality of human resources. It is hoped that this research can be the basis for the development of a more effective and sustainable performance appraisal system in the future.

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