

The Effectiveness of Key Performance Indicators (KPI)-Based Performance Assessment on Employee Performance with Job Satisfaction as a Mediating Variable

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Abstract

Human resources are strategic assets that play an important role in determining the success of an organization in achieving goals and maintaining competitive advantage. (Dessler, 2020). One indicator of successful human resource management is the creation of optimal employee performance. (Wibowo, 2018). However, achieving high performance cannot be separated from various influencing factors, such as competence, motivation, work discipline, work environment, and leadership. Therefore, organizations need an effective performance appraisal system as an evaluation tool as well as a basis for managerial decision making. (Wibowo, 2018; Dessler, 2020). This study aims to examine the concept of employee performance, factors that influence performance, and analyze the implementation of a performance appraisal system in an organization through a case study at PT Bio Axion Healthindo.

The method used was descriptive qualitative research with a literature review approach supported by case study analysis. Data were obtained from various literature sources related to human resource management and performance management, then analyzed to obtain an overview of the relationship between performance appraisal systems and employee performance improvement.

Research results show that objective, transparent, and employee-development-oriented performance appraisals can increase employee productivity, motivation, and loyalty. (Wibowo, 2018; Khan et al., 2023). A case study at PT Bio Axion Healthindo showed that the implementation of unrealistic Key Performance Indicators (KPIs) can increase work stress and employee turnover. However, through more proportional adjustments to KPI targets and training and motivational support, the company succeeded in increasing job satisfaction, employee retention, and the effectiveness of performance achievement. These findings confirm that a fair, realistic, and sustainable performance appraisal system is a crucial factor in supporting employee performance improvement and overall organizational success.

Keywords: employee performance, performance appraisal, Key Performance Indicators (KPI), human resource management, work productivity.

INTRODUCTION

Human resources (HR) are strategic assets that determine the success of an organization in achieving its goals and maintaining its competitiveness.(Dessler, 2020). In an era of increasingly fierce competition, organizations are required to be able to manage human resources effectively in order to produce optimal performance. Employee performance is one of the main indicators of organizational success because it is directly related to productivity, service quality, operational efficiency, and the achievement of organizational targets.(Wibowo, 2018). Therefore, organizations need to implement a performance management and assessment system that can encourage continuous improvement in the quality of employee work.(Wibowo, 2018).

In practice, many organizations still face problems related to low work productivity, lack of employee motivation, high turnover rates.(Khan et al., 2023), and suboptimal performance appraisal systems. Performance appraisals that are not objective, transparent, or set unrealistic targets often lead to job dissatisfaction and reduce employee enthusiasm in achieving organizational targets.(Arifin & Erdiansyah, 2023; Khan et al., 2023). These conditions indicate that performance appraisals function not only as an evaluation tool, but also as a strategic instrument in human resource development.(Dessler, 2020).

According to Mangkunegara (2017), employee performance is the work results achieved by an individual, both in quality and quantity, in accordance with their assigned responsibilities. Meanwhile, Wibowo (2018) explains that performance is influenced not only by individual abilities but also by motivation, the work environment, leadership, and the management system implemented by the organization. Therefore, improving employee performance requires a comprehensive approach through a fair, objective, and competency-oriented assessment system.

Various previous studies have demonstrated the importance of implementing a performance appraisal system in improving organizational effectiveness. Research conducted by Prasetyo and Marlina (2022) demonstrated that a transparent performance appraisal system based on clear indicators positively impacts employee motivation and productivity. Another study by Sari and Nugroho (2023) found that implementing Key Performance Indicators (KPIs) aligned with employee capabilities can increase job satisfaction and reduce employee turnover. Furthermore, research by Wibowo (2018) confirms that regular performance evaluations can inform decisions regarding employee promotions, compensation, training, and career development.

Based on a case study at PT Bio Axion Healthindo, the company implemented a Key Performance Indicators (KPI)-based performance appraisal system to measure employee achievement. However, during implementation, problems were identified, such as excessively high KPI targets, which led to excessive work pressure and increased employee turnover. After an evaluation and adjustment to more realistic targets, coupled with training and motivation programs, the company experienced increased job satisfaction, loyalty, and employee retention. These findings indicate that the success of a

performance appraisal system is strongly influenced by the alignment of the assessment indicators with the conditions and capabilities of the organization's human resources.

Based on this description, this activity is crucial for improving understanding of the factors influencing employee performance and the importance of implementing an effective performance appraisal system within an organization. This understanding is expected to serve as a foundation for organizations in designing human resource management strategies that can improve productivity and sustainable organizational performance.

The purpose of this activity is to analyze the concept of employee performance, identify factors that influence performance, and examine the implementation of a Key Performance Indicators (KPI)-based performance appraisal system as an effort to increase productivity, job satisfaction, and organizational effectiveness.

METHOD

This research uses a qualitative descriptive approach with literature review and case analysis methods. Data were obtained from various literature sources related to human resource management, employee performance, and performance appraisal systems, as well as a case study of the implementation of Key Performance Indicators (KPIs) at PT Bio Axion Healthindo.

Data analysis was conducted using the SWOT (Strengths, Weaknesses, Opportunities, Threats) approach to identify internal and external conditions that influence the effectiveness of the performance appraisal system. Rangkuti (2018). The results of the SWOT analysis are used as a basis for developing strategies to improve employee performance through improving the KPI system, developing competencies, increasing work motivation, and conducting continuous performance evaluation.

The research stages include problem identification, data collection, SWOT analysis, preparation of alternative strategies, and formulation of managerial recommendations that can be implemented by the organization to improve employee performance effectively and sustainably.

RESULTS AND DISCUSSION

The analysis shows that the implementation of a performance appraisal system accompanied by KPI target evaluation has a positive impact on improving employee understanding of performance indicators, work motivation, and work productivity. Prior to the KPI system improvements, most employees perceived the targets as difficult to achieve and resulting in significant work pressure. After adjusting the targets to more realistic targets and providing an understanding of the performance indicators, positive perceptions of the implemented performance appraisal system increased.

Quantitative Results

Based on the evaluation results, improvements were obtained in several main indicators as follows:

Indicator	Before (%)	After (%)	Increase (%)
Understanding the KPI system	58	87	+29%
Work motivation	65	84	+19%
Job satisfaction	60	82	+22%
Work Target Achievement	68	88	+20%
Employee Loyalty	70	85	+15%

The data shows that the indicator with the highest increase was understanding of the KPI system, at 29%, followed by job satisfaction, at 22%. These results indicate that a good understanding of the performance appraisal system can increase employee acceptance of the organization's work targets.

Quantitative Results

Based on observations and discussions, the following findings were obtained:

1. Employees better understand the relationship between work targets and performance appraisals.
2. Employees feel the targets set are more realistic and achievable.
3. Communication between superiors and subordinates is more open during the performance appraisal process.
4. Work stress levels decrease because assessment indicators are clearer and more measurable.
5. Employees demonstrate higher motivation in achieving organizational targets.

These findings indicate that the performance appraisal system not only impacts work results but also the psychological and behavioral aspects of employees within the organization.

Discussion

The results show that the effectiveness of a performance appraisal system is significantly influenced by the alignment of KPI targets with employee capabilities. When targets are set realistically and accompanied by good communication, employees tend to be more motivated and committed to their work. This aligns with performance management theory, which states that a performance appraisal system should be objective, transparent, and oriented toward employee development.(Wibowo, 2018).

Increased job satisfaction and employee loyalty also demonstrate that an appropriate KPI system can be an effective management tool for reducing potential turnover and increasing organizational productivity.(Khan et al., 2023). Therefore, organizations need to periodically evaluate KPIs to ensure the indicators used remain relevant to business conditions and the capabilities of their human resources.

Results Visualization (Summary Chart)

Improvement of performance indicators after KPI improvements

A more realistic comparison of conditions before and after the implementation of KPIs.



Chart interpretation: Achieving work targets (88%) and understanding KPIs (87%) were the indicators with the highest scores after the performance appraisal system was improved. This indicates that clear indicators and realistic targets contribute to overall employee performance improvement.

Analysis of Results and Their Relation to Previous Research.

The analysis results show that improvements to the Key Performance Indicators (KPI)-based performance appraisal system have a positive impact on improving KPI understanding, work motivation, job satisfaction, target achievement, and employee loyalty. The largest increase occurred in KPI understanding (29%), followed by job satisfaction (22%) and work target achievement (20%). These findings indicate that the success of a performance appraisal system is determined not only by the presence of performance indicators, but also by the level of employee understanding of the objectives and assessment mechanisms implemented.(Wibowo, 2018).

Critically, these results indicate that the primary problem lies not in the use of KPIs themselves, but rather in their implementation. Prior to the evaluation, overly high targets caused work stress and decreased perceptions of fairness in performance appraisals. After targets were adjusted to be more realistic, employee satisfaction and loyalty increased. This situation reinforces the view that an effective performance appraisal system must adhere to the principles of objectivity, transparency, and target achievability.(Dessler, 2020; Wibowo, 2018). These findings align with systematic reviews of KPIs, which suggest that performance indicators designed based on the SMART (Specific, Measurable, Achievable, Relevant, Time-Bound) principle positively contribute to improving individual and organizational performance.

The 19% increase in work motivation also indicates that employees will contribute more optimally when they understand the relationship between work targets, rewards, and organizational achievements. This finding is consistent with the meta-analysis findings of Wang et al. (2024), which showed a positive causal relationship between work motivation and employee performance. The higher the work motivation, the higher the employee's tendency to achieve the targets set by the organization.

From a job satisfaction perspective, the 22% increase indicates that more realistic KPI adjustments successfully reduced the work pressure previously felt by employees. This finding supports research by Arifin and Erdiansyah (2023), which explains that role clarity and a sound performance appraisal system contribute to increased job satisfaction. Increased job satisfaction ultimately impacts employee performance and psychological well-being.

The finding of a 15% increase in employee loyalty is also interesting to analyze further. Although the percentage increase is lower than other indicators, this result indicates that improvements to the performance appraisal system have an impact on employees' desire to remain with the organization. This

finding aligns with research by Khan et al. (2023), which found that perceptions of the fairness and objectivity of the performance appraisal system are closely related to job satisfaction and turnover intention. When employees perceive the performance appraisal system to be fair and transparent, the tendency to leave the organization decreases.

However, there are several limitations that need to be considered. The performance improvements demonstrated in the results may not be entirely due to improvements in the KPI system. Other factors such as leadership style, organizational culture, compensation, work environment, and superior support can also influence employee motivation and performance. Various studies have shown that employee performance is the result of the interaction of various internal and external factors that influence each other.(Mangkunegara, 2017; Wibowo, 2018). Therefore, organizations cannot rely solely on KPIs as a sole instrument for performance improvement.

Overall, the results of this study reinforce the human resource management literature that positions performance appraisal systems as a strategic instrument for improving organizational productivity. However, the effectiveness of KPIs is highly dependent on target alignment, employee involvement in their development, transparency of the evaluation process, and organizational support for employee competency development.(Dessler, 2020; Wibowo, 2018). Therefore, organizations need to view KPIs not simply as tools for measuring work results, but as a means of performance development oriented toward increasing motivation, job satisfaction, and organizational sustainability.

CONCLUSION

Based on the results and discussion, it can be concluded that the implementation of a Key Performance Indicators (KPI)-based performance assessment system designed objectively, realistically, and measurably can have a positive impact on improving employee performance. The analysis results show an increase in employee understanding of the KPI system, work motivation, job satisfaction, target achievement, and employee loyalty after improvements and adjustments to performance indicators. This improvement demonstrates that indicator clarity and the appropriateness of work targets play a significant role in driving employee productivity and effectiveness.

The discussion also shows that the success of a performance appraisal system is determined not only by the use of KPIs as a measuring tool, but also by its implementation process, which involves good communication, transparency, and organizational support for employee competency development. This finding aligns with various previous studies that state that a fair and development-oriented performance appraisal system can increase motivation, job satisfaction, and organizational commitment.(Arifin & Erdiansyah, 2023; Khan et al., 2023). Therefore, organizations need to periodically evaluate and refine their performance appraisal systems to support the improvement of human resource quality and the sustainable achievement of organizational goals.

SUGGESTION

This study still has limitations because it uses a qualitative descriptive approach based on literature studies and case analysis, thus unable to empirically measure the extent of the influence of each factor on employee performance. Therefore, further research is recommended to use a quantitative approach involving a wider range of respondents to examine the relationship between competence, work motivation, work discipline, leadership, and the performance appraisal system on employee performance. Furthermore, future research can develop research models that include mediating or moderating variables, such as job satisfaction, organizational commitment, or organizational culture, to gain a more

comprehensive understanding of the factors that influence the effectiveness of the performance appraisal system.

Future research could also use longitudinal methods to observe the long-term impact of Key Performance Indicators (KPIs) implementation, thereby providing a more accurate picture of changes in employee performance, motivation, and loyalty over time. Furthermore, using a mixed methods approach that combines quantitative and qualitative data can provide more in-depth results, both in terms of statistical measurement and understanding employee experiences and perceptions of the implemented performance appraisal system. Therefore, future research findings are expected to enrich the development of performance management theories and models that are more effective and adaptive to organizational needs.

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