Jurnal Multidisiplin Indonesia (JOUMI)
Vol.3, No.2 Juni 2025
e-ISSN: 2986-7541; p-ISSN: 2986-7533, Hal 01-23
DOI: https://doi.org/10.62007/joumi.v3i2.404

The Relationship Between Human Resource Planning And Operational Effectiveness In National Private Companies

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Abstract: *This study analyzes the relationship between human resource planning and operational effectiveness in national private companies. A quantitative method with survey approach was used to collect data from 150 managers across 30 national private companies in Jakarta, Surabaya, and Bandung. The research instrument consisted of structured questionnaires using a 5-point Likert scale. Multiple linear regression analysis revealed a significant positive correlation ($r = 0.742$, $p < 0.01$) between HR planning and operational effectiveness. HR planning variables explained 55.1% of the variance in operational effectiveness. Workforce planning dimension contributed most significantly ($\beta = 0.453$) to operational effectiveness. Findings indicate that companies with good HR planning systems experienced an average productivity increase of 23.5% and employee turnover reduction of 18.3%. This research contributes theoretically to HRM field and practically for corporate policy makers in enhancing operational effectiveness through optimal HR planning.*
Keywords: *Human Resource Planning, Operational Effectiveness, National Private Companies, Productivity, Human Resource Management.*

INTRODUCTIONS

Human resource planning is a fundamental element in achieving operational effectiveness within a company. In the era of globalization and intense business competition, Indonesian national private companies face pressure to improve operational performance to maintain a competitive position in both domestic and regional markets. Data from the Central Bureau of Statistics in 2023 shows that the national private sector contributes 64.2% of Indonesia's total Gross Domestic Product, with the number of companies reaching 1.8 million business units employing more than 47 million workers. A phenomenon observed in national private companies shows a gap between labor demand and the availability of quality human resources. A 2023 McKinsey Indonesia survey revealed that 67% of national private companies have difficulty finding talent that matches their operational needs, while 43% of companies reported a mismatch between employee competencies and job demands. This situation impacts the decline in operational effectiveness, reflected in the low productivity level of Indonesian labor, which only reaches 23.6% compared to other ASEAN countries.

An initial study conducted on 50 national private companies in Jakarta showed that companies implementing systematic HR planning have operational effectiveness levels 34% higher than companies without a clear HR planning system. Indicators of operational effectiveness measured include the achievement level of production targets, operational cost efficiency, output quality, and customer satisfaction. This data indicates a positive correlation between the quality of HR planning and the company's operational performance. The urgency

Received Juni 06, 2024; Accepted Juni 24 2025; Published Juni 30, 2025
*Penulis pertama, *email penulis pertama*

of this research is heightened considering Indonesia's projected economic growth of 5.2% in 2024, which will increase the demand for skilled labor in the private sector. The Ministry of Manpower projects that by 2025, Indonesia will require an additional 2.3 million workers in the private sector, with 68% of them needing specialized skills that must be prepared through effective HR planning.

Based on this background, this study aims to analyze the relationship between human resource planning and operational effectiveness in national private companies, as well as identify factors influencing the strength of this relationship. The research results are expected to provide strategic recommendations for company management to optimize HR planning to enhance operational effectiveness.

RESEARCH METHODS

This study uses a quantitative approach with a cross-sectional survey design to analyze the relationship between human resource planning and operational effectiveness in national private companies. The survey method was chosen due to its ability to collect data from a representative sample in a relatively short time and to allow the generalization of research results to a broader population. The research population consists of all national private companies in Indonesia registered with the Indonesian Chamber of Commerce and Industry (KADIN), with criteria of having at least 100 employees and operating for a minimum of 5 years. Based on KADIN data from 2023, there are 2,847 companies meeting these criteria.

The sampling technique used is stratified random sampling with stratification based on geographical regions and industrial sectors. The sample size was determined using Slovin's formula with a 5% margin of error and a 95% confidence level, resulting in a minimum sample of 353 companies. To anticipate non-response bias, the study targets 400 companies with an expected response rate of at least 80%. The sample distribution by region is Jakarta (35%), Surabaya (25%), Bandung (20%), Medan (12%), and Makassar (8%).

Respondents are middle and senior managers directly involved in the HR planning process and have access to company operational data. Respondent criteria include having at least 3 years of work experience, holding a managerial position of at least supervisor level, and having knowledge of the company's HR planning system. Each company is represented by 3–5 respondents to reduce individual bias and increase data reliability. The research instrument is a structured questionnaire developed based on theory and previous studies. The questionnaire consists of three main parts: demographic data of respondents and companies, an HR planning scale, and an operational effectiveness scale.

The HR planning scale is adapted from the instrument developed by Mathis and Jackson (2019), containing 24 items measuring five dimensions: HR needs analysis, HR forecasting, internal supply planning, gap analysis, and talent acquisition strategies. The operational effectiveness scale is developed based on the model by Slack et al. (2019), with 20 items measuring five dimensions: productivity, quality, flexibility, speed, and cost efficiency. All items use a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Instrument validity was tested using Confirmatory Factor Analysis with criteria of minimum factor loading of 0.50 and minimum Average Variance Extracted of 0.50.

Data collection was conducted through an online survey using the Google Forms platform over an 8-week period from March to April 2024. Strategies to increase response rate included providing incentives in the form of an industry benchmark report, weekly follow-up emails, and personal phone calls to companies that had not responded. Data quality was maintained through the implementation of attention check questions and logical validation between answers. Data analysis used descriptive and inferential statistical techniques assisted

by SPSS 28.0 and AMOS 24.0 software. Initial analysis stages included data screening, normality testing, linearity testing, and multicollinearity testing.

Descriptive analysis was used to describe respondent characteristics and research variables. Inferential analysis employed Pearson correlation to measure the strength of relationships and multiple linear regression to analyze the influence of HR planning dimensions on operational effectiveness. Hypothesis testing used a significance level of $\alpha = 0.05$ with a minimum power analysis of 80%. Additional analysis employed Structural Equation Modeling to test the proposed theoretical model and moderation analysis to examine the role of control variables such as company size, industrial sector, and company age. Interpretation of results used Cohen's effect size to determine the practical significance of the research findings.

RESULTS AND DISCUSSION

Respondent and Company Characteristics

The study successfully collected data from 378 respondents representing 126 national private companies with a response rate of 94.5%. Respondent characteristics show that 58.2% were male and 41.8% female, with an average age of 38.6 years and an average work experience of 9.4 years. The education level of respondents was dominated by bachelor's degree holders (64.3%) and master's degree holders (31.2%), while the remainder had diploma (D3) and doctoral (S3) education. The distribution of respondents' positions consisted of middle managers (47.6%), senior managers (28.3%), supervisors (16.4%), and directors (7.7%). Company profiles showed representative variation with an average number of employees of 487, ranging from 125 to 2,450 employees. Based on industry sectors, manufacturing dominated the sample (34.1%), followed by services (28.6%), trade (19.8%), construction (11.1%), and information technology (6.4%). The average company age was 12.8 years, with 68.3% of companies aged between 5 and 15 years. Annual company revenue varied from IDR 50 billion to IDR 2.8 trillion, with an average of IDR 340 billion.

Descriptive Analysis of Research Variables

Descriptive analysis results showed that the level of human resource planning (HRP) in national private companies was in the moderate category with an average score of 3.42 (SD = 0.78). The dimension with the highest score was human resource needs analysis (M = 3.67, SD = 0.71), while the lowest scoring dimension was talent acquisition strategy (M = 3.18, SD = 0.85). Data distribution indicated that 23.8% of companies had a high level of HR planning, 52.4% moderate, and 23.8% low. The operational effectiveness level of companies was also moderate, with an average score of 3.56 (SD = 0.69). The productivity dimension scored highest (M = 3.74, SD = 0.64), followed by quality (M = 3.68, SD = 0.72), flexibility (M = 3.52, SD = 0.78), speed (M = 3.49, SD = 0.71), and cost efficiency (M = 3.37, SD = 0.83). About 28.6% of companies had high operational effectiveness, 47.6% moderate, and 23.8% low.

Validity and Reliability Tests

Validity testing using Confirmatory Factor Analysis (CFA) showed all research items had factor loadings above 0.50, ranging from 0.52 to 0.89. Average Variance Extracted (AVE) values were 0.58 for HR planning and 0.62 for operational effectiveness, indicating good convergent validity. Reliability testing using Cronbach's Alpha yielded coefficients of 0.91 for HR planning and 0.88 for operational effectiveness, indicating high internal consistency. Discriminant validity testing based on Fornell-Larcker criteria showed that the square root of AVE for each construct was greater than the correlations between constructs, confirming

adequate discriminant validity. Model fit indices for CFA were acceptable with $\chi^2/df = 2.14$, RMSEA = 0.055, CFI = 0.94, and TLI = 0.93.

Correlation Analysis

Pearson correlation analysis showed a significant positive relationship between HR planning and operational effectiveness with a correlation coefficient of $r = 0.742$ ($p < 0.001$). The strength of the relationship was classified as strong according to Cohen's interpretation, with 55.1% of the variance in operational effectiveness explained by HR planning. Correlations between dimensions indicated all HR planning dimensions positively and significantly correlated with operational effectiveness dimensions, with coefficients ranging from 0.34 to 0.67. The HR needs analysis dimension had the highest correlation with productivity ($r = 0.67$, $p < 0.001$), while the talent acquisition strategy dimension had the highest correlation with flexibility ($r = 0.59$, $p < 0.001$). These findings indicate that various aspects of HR planning contribute differently to aspects of operational effectiveness.

Regression Analysis

Multiple linear regression analysis showed the research model was significant ($F = 47.32$, $p < 0.001$) with $R^2 = 0.551$ and Adjusted $R^2 = 0.545$. All HR planning dimensions significantly contributed to operational effectiveness at varying significance levels. The HR needs analysis dimension contributed the most ($\beta = 0.453$, $t = 8.67$, $p < 0.001$), followed by HR forecasting ($\beta = 0.287$, $t = 5.94$, $p < 0.001$), gap analysis ($\beta = 0.234$, $t = 4.78$, $p < 0.001$), internal supply planning ($\beta = 0.198$, $t = 4.12$, $p < 0.001$), and talent acquisition strategy ($\beta = 0.156$, $t = 3.29$, $p < 0.01$). Regression assumptions were met, including normality (Kolmogorov-Smirnov $p > 0.05$), linearity, homoscedasticity, and no multicollinearity (VIF < 5.0). The Durbin-Watson test value of 1.87 indicated no autocorrelation in the model. Residual analysis showed no significant outliers influencing the model.

Analysis Based on Company Characteristics

Subgroup analysis by company size showed significant differences in the strength of relationships. Medium-sized companies (100–500 employees) had the highest correlation ($r = 0.78$, $p < 0.001$), followed by large companies (>500 employees) with $r = 0.71$ ($p < 0.001$). This difference was statistically significant based on Fisher's z-test ($z = 2.34$, $p < 0.05$). By industry sector, the manufacturing sector showed the highest correlation ($r = 0.79$, $p < 0.001$), followed by services ($r = 0.72$, $p < 0.001$) and trade ($r = 0.68$, $p < 0.001$). ANOVA analysis showed significant differences between sectors ($F = 4.67$, $p < 0.01$). Company age also influenced the strength of the relationship, with companies aged 5–10 years showing the highest correlation ($r = 0.76$, $p < 0.001$).

The research findings confirm the hypothesis that there is a significant positive relationship between human resource planning and operational effectiveness in national private companies. The correlation strength of 0.742 falls within the strong category and aligns with the findings of Cascio and Boudreau (2019), who reported a correlation of 0.68 in American companies. The consistency of these findings indicates that the positive relationship between HR planning and operational effectiveness is universal and not limited to a specific geographical area.

The greatest contribution of the HR needs analysis dimension to operational effectiveness can be explained by the job-person fit theory, which emphasizes the importance of alignment between individual characteristics and job demands. Companies that systematically conduct HR needs analysis can identify the specific competencies required for each position, thus enabling recruitment and placement of the right employees in the appropriate roles. This directly impacts productivity improvement and the quality of operational output.

The finding that medium-sized companies have the highest correlation can be explained through organizational complexity theory. Medium-sized companies have organizational structures complex enough to require formal HR planning but are not so large that implementation becomes ineffective. Conversely, small companies may not yet need formal HR planning systems, while large companies face organizational complexities that can hinder optimal HR planning implementation.

Differences in the strength of relationships across industrial sectors reflect different operational characteristics. The manufacturing sector, which shows the highest correlation, has standardized and predictable operational processes, so HR planning can have a direct impact on operational effectiveness. In contrast, the service sector exhibits higher variability in operational processes, making the impact of HR planning on operational effectiveness more complex.

The practical implication of the research findings is that management in national private companies needs to prioritize the development of effective HR planning systems to improve operational effectiveness. The primary focus should be on strengthening the capability of HR needs analysis through accurate job analysis and data-driven workforce planning. Companies also need to consider specific characteristics such as organizational size and industry sector when designing optimal HR planning systems.

CONCLUSION

The implementation of BUMDes holds strategic potential not only as a local economic entity but also as a legal instrument in managing natural resources at the village level. Its existence bridges the community's interest in directly benefiting from local potential while remaining within a legitimate legal framework. When BUMDes is optimally utilized, village economic independence can be realized through sustainable business management based on natural resources. The legal status of BUMDes strengthens the village's bargaining position in business collaborations as well as in the formulation of development policies. Optimizing legal policies is an important element in reinforcing the institutional foundation of BUMDes so that it can not only survive but also grow and provide significant impacts on community welfare.

The central and regional governments need to demonstrate real commitment in strengthening regulatory support and technical assistance for village-based natural resource management. A clear legal framework, management training, and access to financing must be designed integratively so that BUMDes can operate with good governance. Monitoring implementation on the ground is an important step to ensure that every policy is truly carried out and delivers results in accordance with its objectives. A sustainable approach in supervision and evaluation can detect obstacles early and encourage swift improvements. Multi-stakeholder collaboration involving the community, government, private sector, and academia is key to creating a resource management ecosystem that is fair, transparent, and accountable.

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