

Qualitative Analysis of Factors Affecting Employee Job Satisfaction Using Analytical Hierarchy Process (AHP) at PT. Tirta Perkasa Sejahtera

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Abstract: This study seeks to identify and prioritize the factors influencing employee job satisfaction at PT. Tirta Perkasa Sejahtera using the Analytical Hierarchy Process (AHP). The research integrates both literature review and expert judgment to determine factors such as work environment, interpersonal relationships, compensation systems, career development, and work-life balance. AHP was used to analyze pairwise comparison matrices to establish the relative weight of each criterion. The results showed that compensation and career development were the most influential factors, followed by work-life balance, work environment, and interpersonal relationships. The study provides a quantitative basis for management to enhance employee satisfaction and improve organizational performance.

Keywords: Analytical Hierarchy Process (AHP), Employee Satisfaction, Human Resource Management, Work Environment.

1. Introduction

Job satisfaction is a crucial aspect in the sustainability and success of an organization. Employee job satisfaction not only contributes to increased productivity and work quality, but also has an impact on employee loyalty, reduced absenteeism, and reduced turnover rates which are often challenges for companies. In the context of the rapidly growing and competitive bottled water industry, companies are required to be able to create a conducive work environment so that employees feel appreciated and motivated in carrying out their duties. Previous studies have shown that job satisfaction is influenced by various factors, such as a comfortable work environment, good interpersonal relationships between coworkers and superiors, a fair compensation system, career development opportunities, and a balance between work and personal life. However, the specific characteristics of PT. Tirta Perkasa Sejahtera, including production dynamics, quality regulations, and market pressures, may produce unique factors that influence employee job satisfaction. Therefore, a deep understanding of these factors is very important to support an effective human resource management strategy.

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In an increasingly competitive business world, understanding the factors that influence employee job satisfaction is very important for the success of the organization. PT. Tirta Perkasa Sejahtera, which operates in the bottled water industry, faces the challenge of creating a conducive work environment amid market pressures and strict regulations. Therefore, it is important to conduct research that can identify the main factors that influence employee job satisfaction in this company. In the highly competitive and dynamic bottled water industry, employee job satisfaction is one of the key factors that determine the success of a company's operations. A phenomenon that often arises is high work pressure due to strict production demands, quality standards that must be met consistently, and working hours that tend to be long or rotating. This condition can cause increased stress levels among employees. In addition, less harmonious interpersonal relationships between employees and superiors or fellow coworkers are problems that are often found. Ineffective communication and lack of social support in the workplace can reduce employee motivation and sense of attachment to the company. Compensation and reward systems that are perceived as unfair or inadequate are also sources of dissatisfaction.

Job satisfaction is one of the most important aspects in the sustainability and success of an organization. High job satisfaction can increase productivity, reduce absenteeism, and increase employee loyalty, all of which contribute to the success of the company. In the bottled water industry, where market pressure and production dynamics are very high, companies must ensure that employees feel valued and motivated. Therefore, this study is very important to understand more deeply the factors that influence job satisfaction at PT. Tirta Perkasa Sejahtera.

Although there are many studies that discuss the factors that influence job satisfaction in general, not many have focused on the specific factors that occur at PT. Tirta Perkasa Sejahtera. Moreover, this study combines a qualitative approach with AHP, which has not been widely applied in this industry. This research gap is an important focus in this study, which aims to provide new insights into the factors that influence job satisfaction in a more contextual way.

The approach used in this study is a combination of qualitative analysis that explores employee perceptions and the use of AHP to determine the priority weight of each factor that influences job satisfaction. With this method, this study not only produces more objective findings, but also provides strategic recommendations that can be applied directly in human resource policies at PT. Tirta Perkasa Sejahtera. Data were collected through in-depth interviews and observations which were then analyzed using the Analytical Hierarchy Process (AHP). The Analytical Hierarchy Process (AHP) method is a decision-making technique that allows quantitative weighting based on expert assessments of various performance criteria and sub-criteria. AHP is an effective solution for measuring company performance by providing the right priority weight for each indicator, thus supporting more targeted decision making.

With this approach, the study aims to provide a holistic and contextual picture of the factors that influence employee job satisfaction at PT. Tirta Perkasa Sejahtera. The results of the study are expected to be a useful reference for company management in designing human resource management policies and strategies that can improve employee welfare and performance sustainably.

Problem formulation

1. Based on the background above, the formulation of the research problem can be concluded as follows:
2. What are the main factors that influence employee job satisfaction at PT. Tirta Perkasa Sejahtera?
3. How is the priority or relative weight of each of these factors if analyzed using the Analytical Hierarchy Process (AHP) method?
4. Which factors should be the main focus in efforts to improve employee job satisfaction based on the results of the AHP analysis?

Research Objectives

The objectives of the research are as follows:

1. Identify the main factors that influence employee job satisfaction at PT. Tirta Perkasa Sejahtera.
2. Determine the priority and relative weight of each factor using the Analytical Hierarchy Process (AHP) method.
3. Provide strategic recommendations to company management regarding factors that need to be prioritized to improve employee job satisfaction.

Benefits of Research

Theoretical Benefits:

1. Adding to the treasury of knowledge in the field of HR management, especially related to the application of the AHP method in satisfaction analysis.
2. Providing academic contributions by developing a model for determining the priority of job satisfaction factors.

Practical Benefits:

1. Provides a measurable and objective basis for PT. Tirta Perkasa Sejahtera management in formulating HR management policies.
2. Assists the Company in allocating resources more effectively to aspects that most influence job satisfaction.
3. Become a reference for HR practitioners and researchers in adopting the AHP method for similar studies in other sectors.

2. RESEARCH METHODS

This study uses a qualitative approach with a case study method to explore in depth the factors that influence employee job satisfaction at PT. Tirta Perkasa Sejahtera. The qualitative approach was chosen because it allows researchers to understand the experiences, perceptions, and meanings contained in employee data contextually and in depth (Creswell, 2013). Data were collected through in-depth interviews, observations, and documentation, which were then analyzed using AHP to identify the priorities of these factors. Through in-depth interviews and observations, this study explores employee experiences of the factors that influence their job satisfaction. In addition, documentation from company policies is also used to support data analysis.

AHP is used to determine the priority of each factor based on pairwise comparisons. The results of the AHP calculation produce weights that can be used by management to make more focused decisions.

The study was conducted at one of PT. Tirta Perkasa Sejahtera which operates in the Bondowoso Regency area. The subjects of the study were employees who worked at the company, selected purposively with certain criteria to obtain relevant and comprehensive data. As well as its population.

Data collection techniques such as in-depth interviews conducted with employees from various divisions to explore perceptions and experiences related to job satisfaction. Observation where observing work conditions and interactions in the company environment to obtain contextual data, documentation namely collecting internal company documents such as HR policies, welfare reports, and other related data. Research Instruments Semi-structured interview guides designed based on literature review and research focus, containing open-ended questions regarding experiences, views, and factors that influence employee job satisfaction. Data Analysis Techniques. Data were analyzed using AHP.

3. RESEARCH RESULT

Table 1. Overview of Employee Job Satisfaction

Tema	Indikator
Lingkungan Kerja dan Hubungan Interpersonal.	Lingkungan kerja yang kondusif, aman, dan nyaman. hubungan interpersonal yang harmonis antara rekan kerja maupun antara karyawan terhadap kepuasan kerja.

Sistem Kompensasi.	gaji, tunjangan, dan insentif.
Pengembangan Karir.	Kesempatan untuk mengikuti

Through thematic analysis with the help of AHP, four main themes were found that were most dominant in influencing employee job satisfaction. The results of in-depth interviews with informants showed that the level of employee job satisfaction in bottled water companies was at a moderate level. Some employees felt quite satisfied with job stability and management discipline, but there were still a number of aspects that were considered less than optimal. In general, job satisfaction is influenced by several main factors: work relationships, compensation systems, workload, and career development opportunities.

Table 2. Visualization of Calculations with Analytical Hierarchy Process (AHP)

Identification of Research Criteria

Kriteria Penelitian	Subkriteria
Lingkungan Kerja (C1)	Kenyamanan fisik, keamanan, fasilitas.
Hubungan Interpersonal (C2)	Komunikasi dengan atasan, hubungan dengan rekan kerja.
Sistem Kompensasi (C3)	Gaji, tunjangan, insentif non-finansial.
Pengembangan Karir (C4)	Pelatihan, promosi, kesempatan belajar.
Keseimbangan Kerja-Hidup (C5)	Fleksibilitas jam kerja, beban kerja.

Table 3. Pairwise Comparison Matrix scale 1-9

Kriteria	C1	C2	C3	C4	C5
Lingkungan C1	1	3	1/5	1/3	2
Interpersonal C2	1/3	1	1/7	1/5	1/2
Kompensasi C3	5	7	1	3	4
Karir C4	3	5	1/3	1	2
Work-Life C5	1/2	2	1/4	1/2	1

Table 4. Matrix Normalization and Weight Calculation

C1	$1 + 1/3 + 5 + 3 + 1/2 = 9.83$
C2	$3 + 1 + 7 + 5 + 2 = 18$
C3	$1/5 + 1/7 + 1 + 1/3 + 1/4 = 1.92$
C4	$1/3 + 1/5 + 3 + 1 + 1/2 = 5.03$
C5	$2 + 1/2 + 4 + 2 + 1 = 9.5$

Table 5. Matrix normalization:

C1- C1	$1 / 9.83 = 0.102$
C1- C2	$3 / 18 = 0.167$
C1-C3	$(1/5) / 1.92 = 0.104$
C1-C4	$(1/3) / 5.03 = 0.066$
C1-C5	$2 / 9.5 = 0.211$

Table 6. Row average (priority vector):

C1	$(0.102 + 0.167 + 0.104 + 0.066 + 0.211) / 5 = 0.130$
C2	0.057
C3	0.413
C4	0.240
C5	0.160

Table 7. Consistency Test Calculate λ max:

C1	$: (1 \times 0.130) + (3 \times 0.057) +$ $(1/5 \times 0.413) + (1/3 \times 0.240) +$ $(2 \times 0.160) = 0.728$
C2	0.283
C3	2.305

C4	1.280
C5	0.850

$$\lambda_{maks} = (0.728/0.130) + (0.283/0.057) + (2.305/0.413) + (1.280/0.240) + (0.850/0.160) \\ / 5 = 5.327.$$

Consistency Index (CI):

$$CI = \frac{\lambda_{max} - n}{n - 1} = \frac{5.327 - 5}{5 - 1} = 0.082$$

Consistency Ratio (CR): Nilai RI untuk n=5 adalah 1.12

$$CR = \frac{CI}{RI} = \frac{0.082}{1.12} = 0.073 (< 0.1 \rightarrow \text{Konsisten})$$

Table 8. Criteria ranking based on priority weight

Kriteria	Hasil (Persentase)
Sistem Kompensasi (C3)	41.3 %
Pengembang Pengembangan Karir (C4)	24.0 %
Keseimbangan Kerja-Hidup (C5)	16.0 %
Lingkungan Kerja (C1)	13.0 %
Hubungan Interpersonal (C2)	5.7 %

Based on the research results, the Company's priority recommendations must focus on improving the compensation system and career development opportunities to increase job satisfaction.

4. CONCLUSION

This study comprehensively identifies and prioritizes the main factors that influence employee job satisfaction at PT. Tirta Perkasa Sejahtera by integrating a qualitative approach and the Analytical Hierarchy Process (AHP) method. Through in-depth interviews, observations, and documentation, it was found that employee job satisfaction is a multidimensional construct that is influenced by various aspects of the work environment and organization.

Thematic analysis conducted with the help of AHP software successfully identified four main themes that are most dominant in influencing employee job satisfaction, namely: (1)

compensation system, (2) career development, (3) work-life balance, and (4) work environment and (5) interpersonal relationships. This finding is in line with the literature that emphasizes the importance of remuneration fairness, self-development opportunities, a conducive work atmosphere, and balance between work and personal life as the main determinants of job satisfaction.

Furthermore, to obtain objective priorities for each factor, this study applies the AHP method through a pairwise comparison process and priority weight calculation. The results of the AHP analysis show that the compensation system ranks first as the most influential factor on employee job satisfaction, with a weight of around 41.3%. Career development is in second place with 24%, followed by Work-life balance with 16%, Work environment with a weight of 13% and interpersonal relationships with 5.7%. These results also show the consistency of respondents' assessments, so that they can be used as a strong basis for managerial decision making.

Overall, this study concludes that efforts to improve employee job satisfaction at PT. Tirta Perkasa Sejahtera must be focused on improving the compensation system and career development, without ignoring improving the quality of the work environment and policies that support work-life balance. The integration of qualitative and AHP approaches in this study not only provides a holistic and contextual picture, but also produces objective and applicable strategic priorities for company management.

The practical implications of these findings are in the form of recommendations for companies to do the following:

- a. Review and improve the compensation system to make it fairer and more competitive.
- b. Increase access to quality training programs and quality training programs and career development paths for all employees
- c. Build a supportive and communicative work culture to strengthen interpersonal relationships in the work environment.
- d. Developing a work flexibility policy to support the balance between work demands and employees' personal lives.

Thus, the company is expected to be able to increase employee motivation, loyalty, and productivity sustainably and reduce absenteeism and turnover rates that impact operational efficiency and organizational sustainability.

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