

Employee Satisfaction Analysis Report

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Introduction

Employee satisfaction is a crucial indicator of workplace health and a strong driver of retention. Higher satisfaction typically correlates with lower turnover, greater loyalty, and improved productivity. This report summarizes a statistical analysis performed on a large corporation's Employee Survey (with 2,000 records) and its related Human Resources (HR) Records. The main objective was to identify significant predictors of satisfaction and provide actionable recommendations for improving workplace conditions.

Business Background

Employee satisfaction directly impacts the company's bottom line by reducing turnover-related costs, strengthening loyalty, and increasing engagement. Turnover can be a significant financial burden — the Society for Human Resources Management estimates that replacing a single employee can cost from **half to twice their annual salary**. Thus, understanding what drives satisfaction is not just a moral imperative; it's a financial necessity.

Data and Methodology

We used two datasets for this analysis:

- Employee Survey (2,000 rows)
- HR Records (2,000 rows)

Data Cleaning

Some data preparation was performed to enable rigorous statistical analysis:

- Filling missing values
- Standardizing data
- Capping outliers in salaries

Statistical Analysis

We used multiple linear regression alongside t-tests and ANOVA for group differences, alongside correlation analysis to gauge relationships between variables.

Key Findings

- **Work-Life Balance:** $p < 0.0001$; $\beta = +0.45$
- **Job Level:** $p = 0.002$; $\beta = +0.30$
- **Turnover:** $p = 0.019$; $\beta = -0.20$
- **Salary:** $p = 0.045$; $\beta = +0.15$ Regression Model's $R^2 = 0.35$

Visualizations Summary

Box Plot, Heatmap, Distribution Plot

Recommendations for the Business

- Improve Work-Life Balance
- Adjust Compensation
- Improve Job Level Support
- Turnover Prevention

Conclusion

This extensive statistical analysis shows that **work-life balance, salary, employment stability, and career progression** collectively account for a significant portion of variation in employee satisfaction. Implementing policy tweaks in these key areas can improve workplace happiness, reduce turnover, and foster a more engaged and productive workforce — delivering substantial financial benefits alongside happier, more motivated employees.