

Analysis Questions

First Category

Employee Demographics & Salary Analysis

- # 1.1 Calculate and display the total number of employees
- # 1.2 Count unique employees by gender
- # 1.3 Count unique employees by department
- # 1.4 Count unique employees by gender within each department
- # 1.5 Count unique employees by education level
- # 1.6 Count unique employees by job role
- # 2. How does the average salary vary by education level?
- # 3. Calculate the average salary by job role for unique employees
- # 4. What is the salary distribution based on years of experience?
- # 5. Calculate the average salary by department for unique employees

Second Category

Employee Satisfaction & Engagement

- # 6. What is the average satisfaction level across different job roles?
- # 7. Calculate average salary by satisfaction level for unique employees
- # 8. Do employees with higher education levels report higher satisfaction?
- # 9. Which departments have the most satisfied and least satisfied employees?
- # 10. Does job role impact satisfaction level? Only Plot without coding

Third Category

Attrition & Turnover Analysis

- # 11. What is the overall employee attrition rate?
- # 12. Which department has the highest employee turnover?
- # 13. Is there a connection between satisfaction level and attrition?
- # 14. Do employees with higher education levels have lower attrition rates?
- # 15. How does tenure (years at company) impact attrition?

Fourth Category

Promotion & Career Growth

- # 16. How long does it take on average, for employees to receive a promotion?
- # 17. Is there a correlation between education level and promotion frequency?
- # 18. Which departments promote employees the fastest and the slowest?
- # 19. What percentage of satisfied employees receive promotions?
- # 20. Does gender impact promotion opportunities?

Additional Questions

- # 21. Calculate the total salary of all employees
- # 22. Calculate total salary distribution by department
- # 23. Calculate the number of employees hired in each year
- # 24. Calculate the Number of Employees based on BusinessTravel and Attrition
- # 25. Calculate the Number of Employees based on OverTime and Attrition
- # 26.1 Define the age ranges of Employees
- # 26.2 Find the minimum and maximum age of employees
- # 26.3 Find the age group with the most employees
- # 27. Calculate the correlation between ManagerRating and JobSatisfaction to assess employee performance
- # 28. Count employees hired per year and Count employees who left (attrition) by each department
- # 29. What is the most common reason for employee turnover

Forecasting Questions

- # 1. Predict attrition for the next 3 years
- # 2. Predict Salary Growth Projection for next 3 years
- # 3. Prediction workforce in 3 years by Department, Age Group & Education Level