DATA ANALYSIS REPORT ON EMPLOYEE RATING INDEX

Introduction

This report aims to analyze the relationship between age group, salary, and employee rating. The dataset includes information on age, age group, department, location, education, recruitment type, job level, on-site, awards, certification, salary, satisfied and employee rating for a sample of employees.

Methodology

The analysis was done on top of python programming language using pandas and matplotlib library. At first, the EDA was done on raw data. Then data was cleaned on MS Excel to which EDA was performed. Again, the relationship between age group, salary, and employee rating was analyzed while also creating bar charts.

Data Collection

Data was extracted for dataset naming Employee Satisfaction Index Dataset from Kaggle website.

Link: https://www.kaggle.com/datasets/mohamedharris/employee-satisfaction-index-dataset?resource=download

Data Analysis

1. Age Group vs. Employee Rating:
    To examine the relationship between age group and employee rating, the average employee rating was calculated for each age group. The results are presented in the table below:

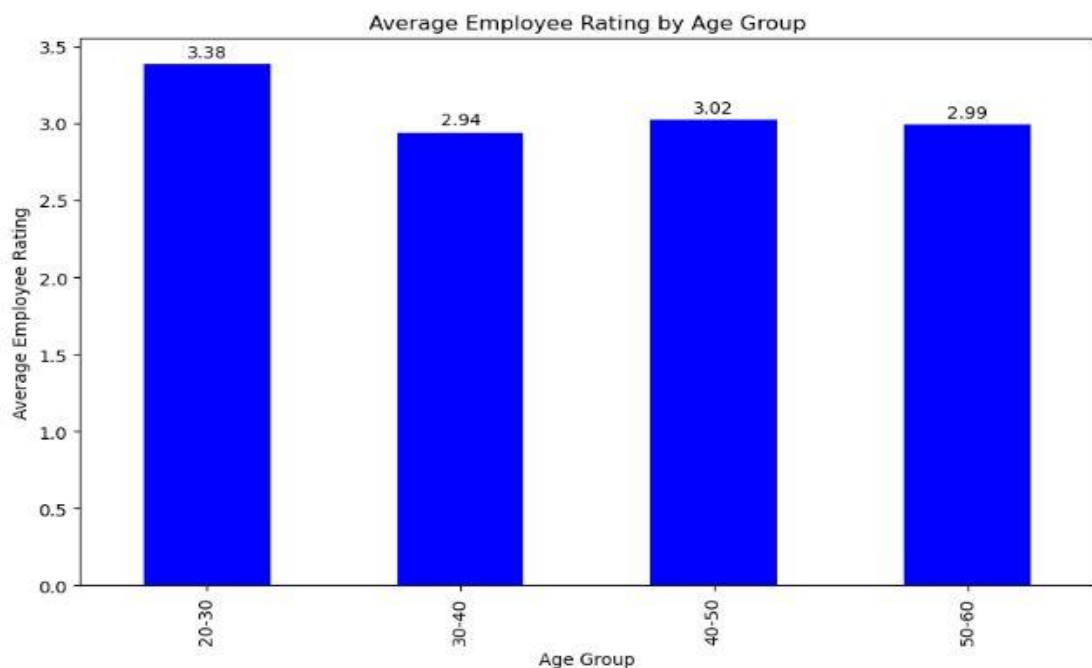| Age Group	Average Employee Rating
20-30	3.38
30-40	2.94
40-50	3.02
50-60	2.99

Below is the bar chart:

Fig: Age Group Vs. Average Employee Rating

From the data, it can be observed that employees in the 20-30 age group have the highest average rating, with a value of 3.38. This is closely followed by the 40-50 age group with an average rating of 3.02. The 50-60 and 30-40 age groups have slightly lower average ratings of 2.99 and 2.94 respectively. These findings suggest that there might be a positive correlation between age group and employee rating, indicating that younger employees tend to have higher ratings.

2. Salary vs. Employee Rating:

To explore the relationship between salary and employee rating, the average employee rating was calculated for each salary. The results are presented in the table below:

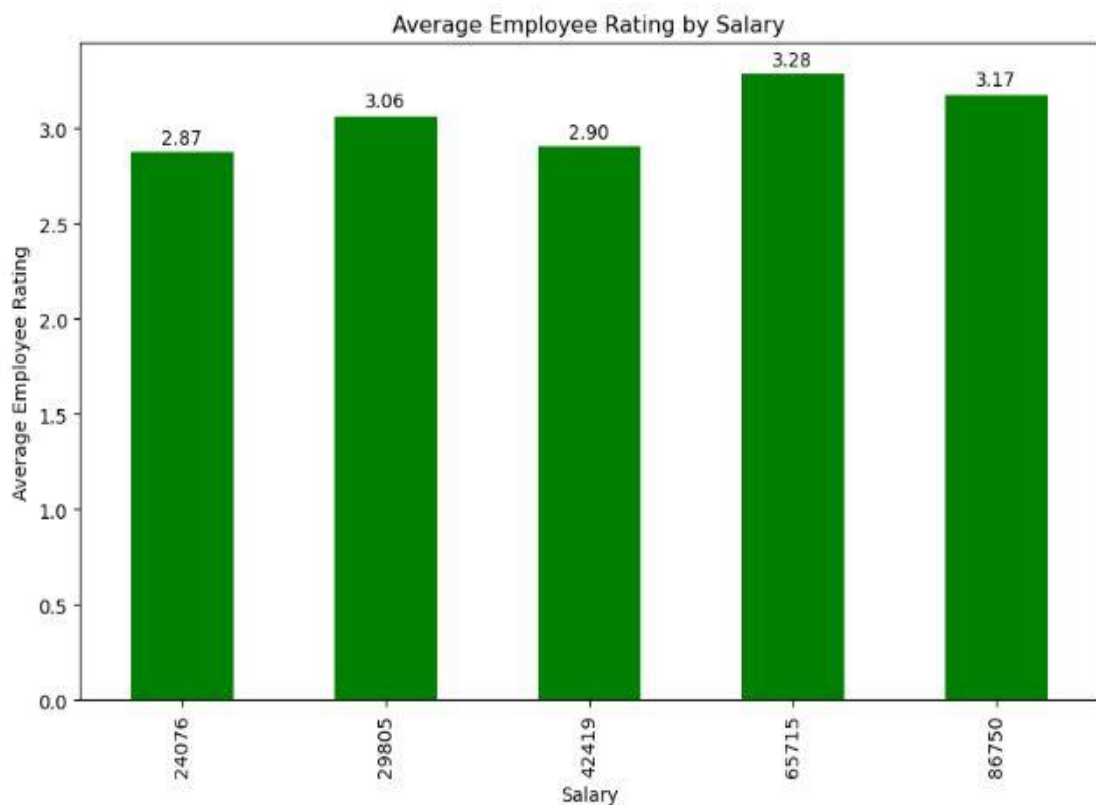| Salary	Average Employee Rating
24076	2.87
29805	3.06
42419	2.90
65715	3.28
86750	3.17

Below is the bar chart:

Fig: Salary Vs. Average Employee Rating

From the data, it can be observed that employees with a salary of 65715 have the highest average rating, with a value of 3.28. This is closely followed by employees with a salary of 86750, who have an average rating of 3.17. Employees with salaries of 29805, 42419 and 24076 have slightly lower average ratings of 3.06, 2.90 and 2.87 respectively. These findings

indicate that there might be a positive correlation between salary and employee rating, suggesting that employees with higher salaries tend to have higher ratings.

Conclusion

Based on the analysis of the dataset, there seems to be a relationship between both age group and salary with employee rating. The results suggest that younger employees (particularly those in the 20-30 age groups) tend to have higher ratings. Additionally, employees with higher salaries (specifically those earning 65715 and 86750) also tend to have higher ratings.