EMPLOYEE DATA ANALYSIS

Summary

In this analysis, we explored various aspects of employee distribution, salary expenditures, and correlations within a dataset, utilizing visualizations to enhance our understanding of the data. Initially, we examined the distribution of employees across different teams, visualized through a bar graph titled **"Percentage of Employees by Team"**. This graph revealed that the New Orleans Pelicans had the highest representation with 19 employees, while several other teams had similar numbers, indicating a balanced distribution across the league. The percentage distribution further highlighted that the Pelicans comprised approximately 4.15% of the total workforce, showcasing their prominence within the dataset.

Next, we segmented the employees based on their positions within the organization, illustrated by another bar graph titled **"Distribution of Employees by Position"** This visualization showed that shooting guards (SG) represented the largest group with 102 employees, followed closely by power forwards (PF) and point guards (PG), emphasizing the strategic importance of these positions in the team's structure. This distribution suggests a well-rounded team composition that favours certain roles, which may reflect the playing style or team strategy.

The analysis then shifted to age demographics, represented in the bar graph **"Predominant Age Group Distribution"**. This graph revealed that the predominant age group among employees was 20-29, with 315 individuals falling into this category. This significant representation of younger employees could indicate a youthful team dynamic, possibly enhancing the team's energy and performance on the court. In contrast, there were minimal employees in the older age groups, suggesting that the organization may prioritize hiring younger talent or that opportunities for advancement may be more limited for older employees.

We also examined salary expenditures by both team and position, visualized in separate bar graphs: **"Highest Salary Expenditure by Team"** and **"Highest Salary Expenditure by Position"** The analysis identified the Cleveland Cavaliers as having the highest total salary expenses at approximately $106 million, while the centre position (C) incurred the highest salary expenditure overall at about $466 million. These findings highlight the financial investments teams make in certain positions and teams, potentially reflecting their strategic priorities and the value they place on specific player roles.

Lastly, we investigated the correlation between age and salary, visualized through a scatter plot titled **"Correlation Between Age and Salary”**. This analysis yielded a correlation coefficient of 0.214, indicating a weak positive relationship. This suggests that, although older employees tend to earn higher salaries, the correlation is not strong, implying that other factors, such as experience, position, and team dynamics, significantly influence salary levels.

Overall, this analysis paints a comprehensive picture of the employee landscape within the organization, revealing key trends and patterns in team distribution, positional representation, age demographics, salary expenditures, and correlations. The insights gathered, supported by visualizations, can inform strategic decisions regarding recruitment, salary structures, and team composition, ultimately enhancing the organization's performance and competitive edge.