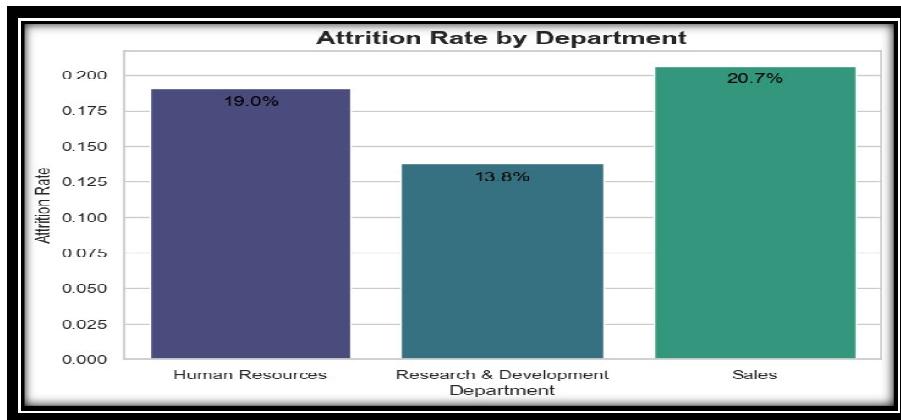


HR ANALYTICS DASHBOARD USING PYTHON – PROJECT 2

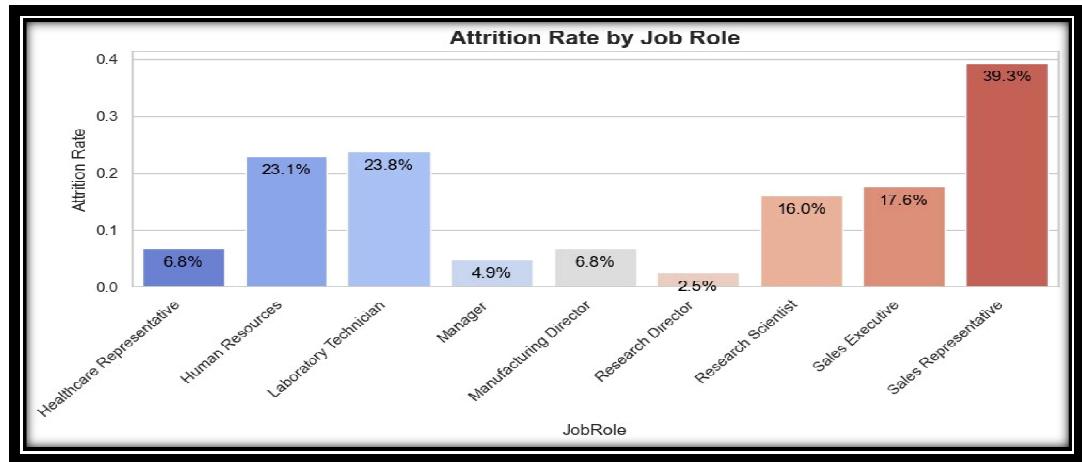
Attrition Rate by Department

- ➡ The Sales and HR departments have the highest attrition rates at 20.7% and 19.0%, respectively, indicating a need for targeted retention strategies. In contrast, the R&D department's lower rate of 13.8% suggests better employee satisfaction in that area.



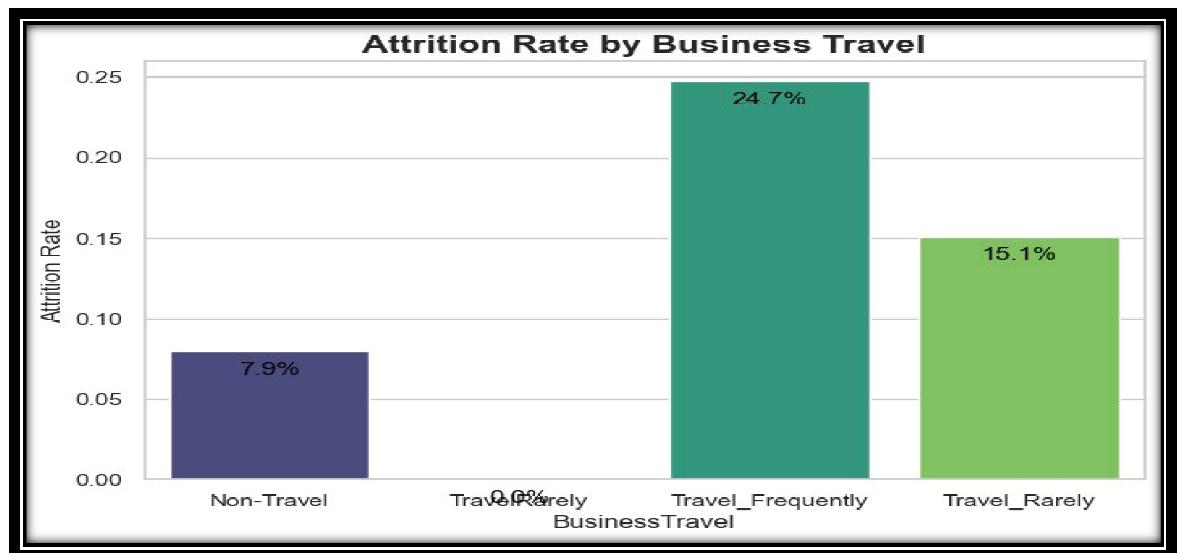
Attrition Rate by Job Role

- ➡ Sales Representatives face the highest attrition rate at 39.3%, indicating a critical need for retention efforts in this role, while Research Directors have the lowest at 2.5%, suggesting high job stability.



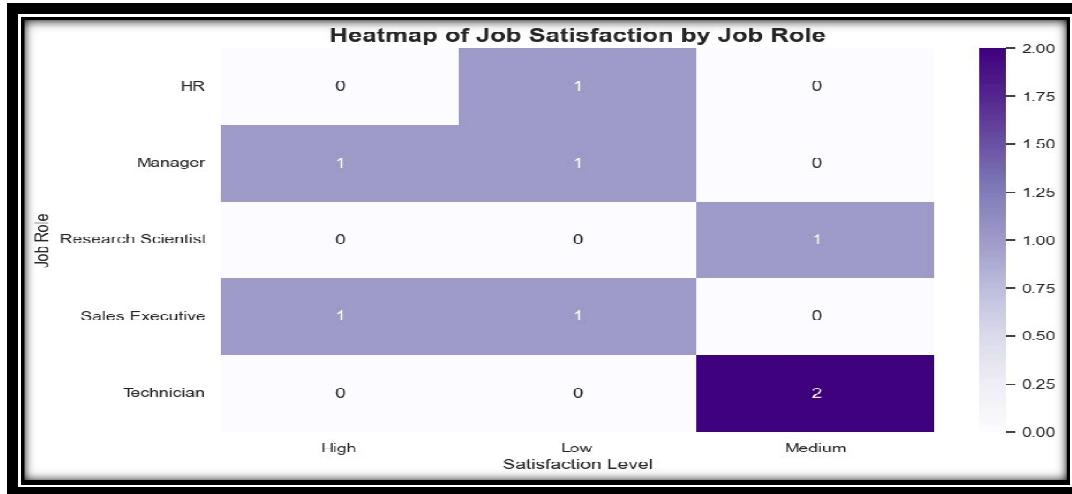
Attrition Rate by Business Travel

- **Non-Travel:** Attrition rate is 7.9%, indicating lower employee turnover among those who do not travel for work.
- **Travel Frequently:** Attrition rate is 24.7%, the highest among the groups, suggesting frequent travel contributes significantly to turnover.
- **Travel Rarely:** Attrition rate is 15.1%, showing moderate turnover compared to frequent travelers.



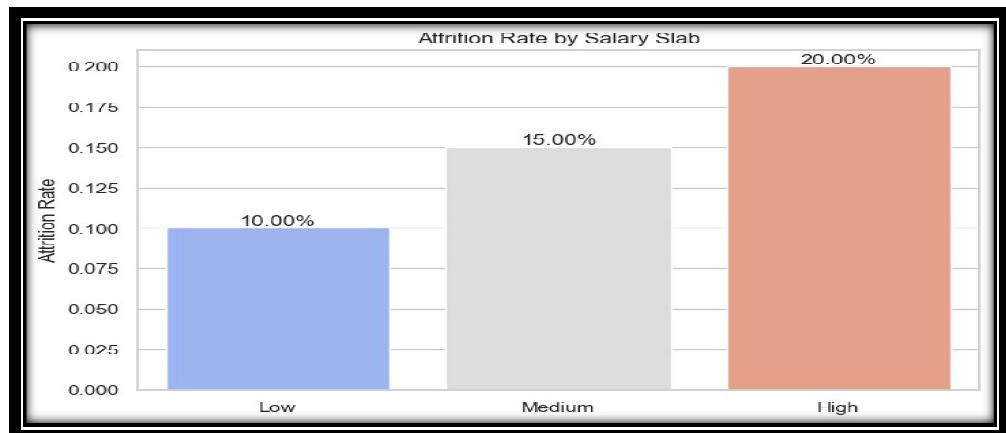
Heatmap of Job Satisfaction by Job Role

- HR shows 1 low satisfaction; Manager, Sales Executive, and Technician show varied satisfaction, with Technicians having 2 medium.
- No high satisfaction for HR, Research Scientists, or Technicians; Medium satisfaction is highest for Technicians.



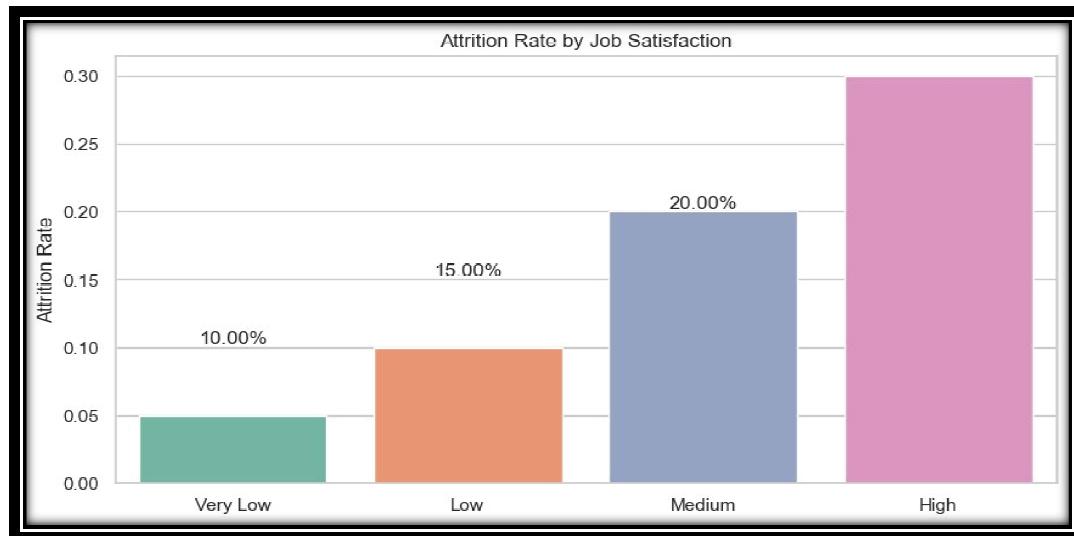
Attrition Rate Insights by Salary Slab

- Attrition is notably higher among employees in lower salary slabs (10%), with a moderate increase in medium slabs (15%) and the highest in high salary slabs (20%), emphasizing the crucial role of compensation in retaining talent.



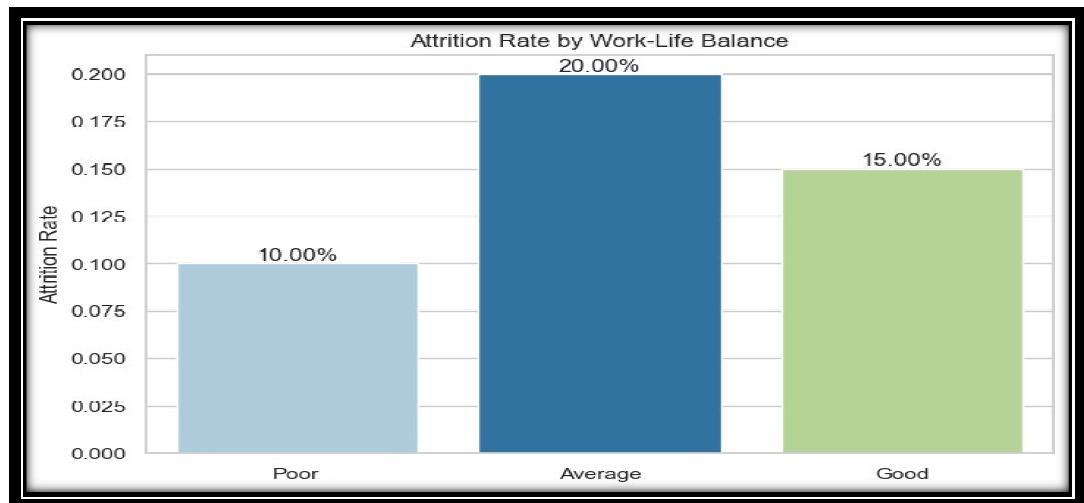
Attrition Rate by Job Satisfaction Levels

- Employees with very low job satisfaction show a 10% attrition rate, increasing to 15% for low satisfaction, 20% for medium, and peaking at 30% for the highest dissatisfaction—highlighting the strong link between job satisfaction and employee turnover.



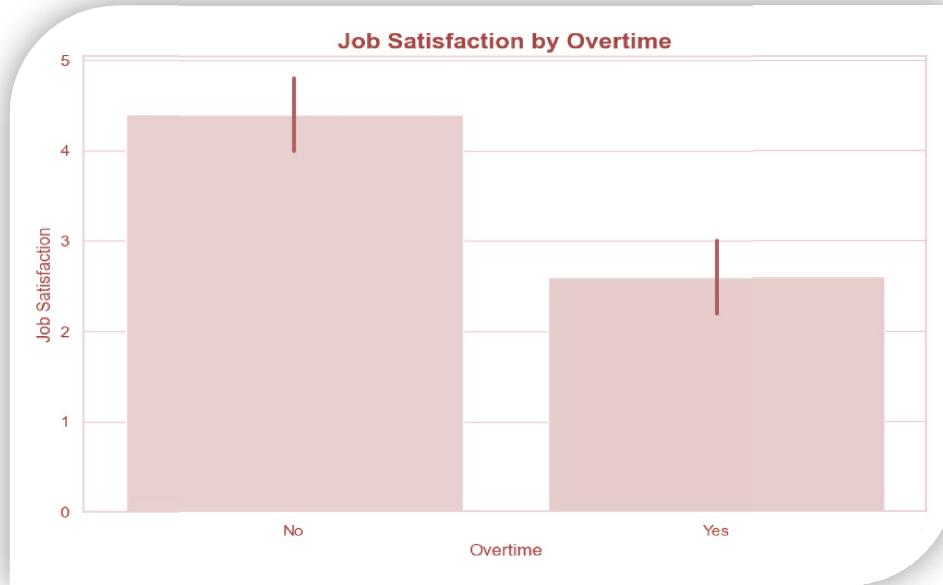
Attrition Rate by Work-Life Balance

- Employees with poor work-life balance have a 10% attrition rate, which rises to 20% with an average balance and drops to 15% when balance is good—showing that a balanced work-life dynamic may lead to fewer job transitions.



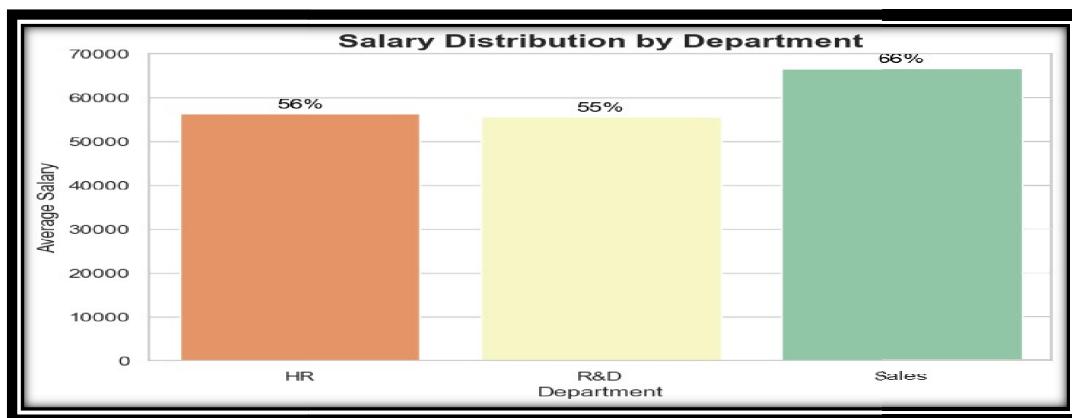
Job Satisfaction by Overtime

- Job satisfaction is notably higher at 4.4 for employees who don't work overtime, compared to 2.7 for those frequently working overtime, indicating a strong link between overtime and lower job satisfaction.



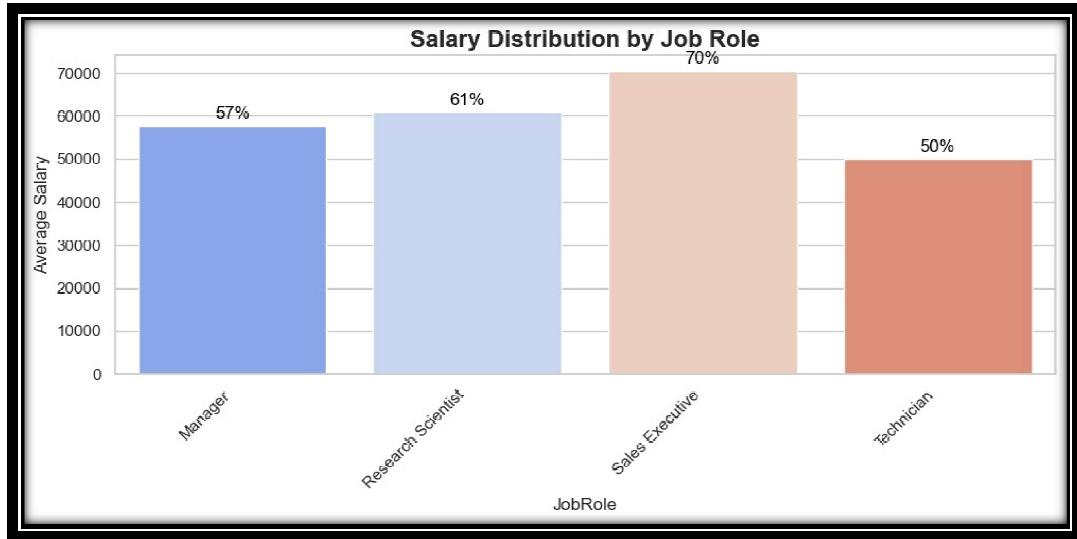
Salary Distribution by Department

- HR has a salary distribution of nearly 56%, R&D at 55%, while Sales leads with 66%, indicating a significant variation in salary allocation across departments.



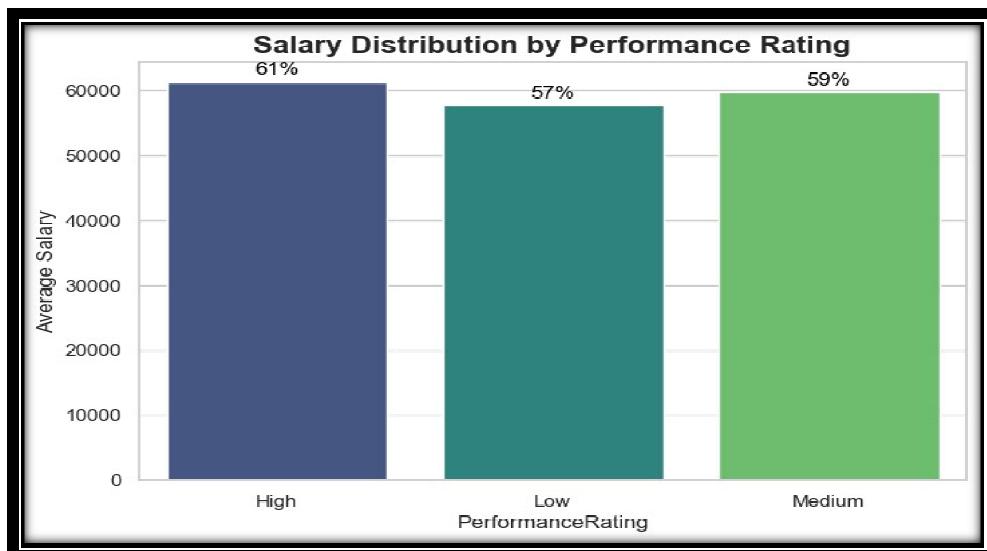
Salary Distribution by Job Role

- Managers have a salary distribution of 57%, Research Scientists at 61%, Sales Executives lead with 70%, while Technicians receive 50%, highlighting disparities across different job roles.



Salary Distribution by Performance Rating

- Employees with the highest performance rating receive 61% of the salary distribution, compared to 57% for low performers and 59% for those with medium ratings, showing a clear link between performance ratings.



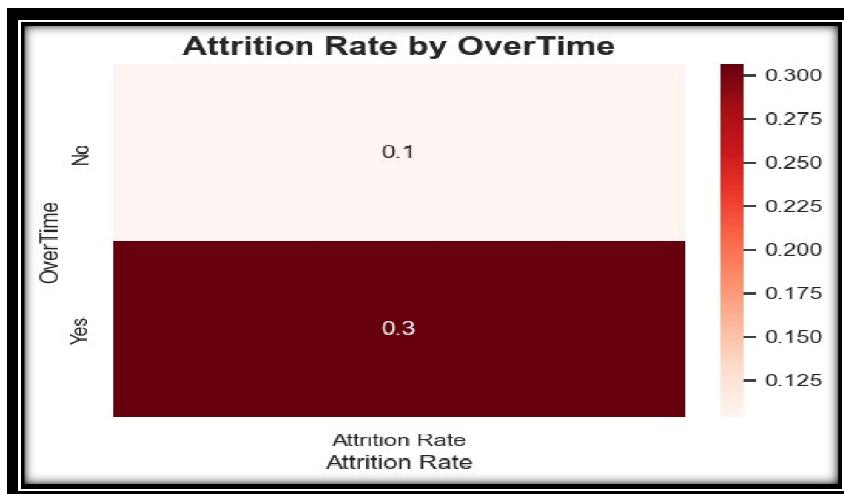
Job Satisfaction by Work-Life Balance

- Employees with poor work-life balance report job satisfaction between 2 to 2.5, while those with an average balance range from 4 to 4.5, and good balance boosts satisfaction to between 3.8 to 5 emphasizing how balance influences contentment at work.



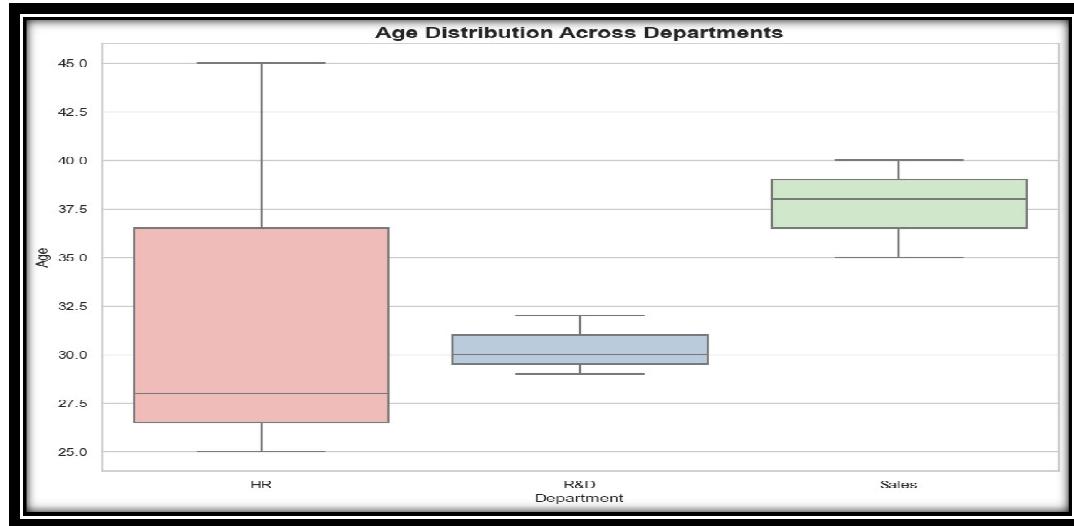
Attrition Rate by Overtime

- Employees working overtime have an attrition rate of 0.3, compared to 0.1 for those who do not, indicating that overtime may contribute to higher employee turnover.



Age Distribution Across Departments

- In HR, the age distribution ranges from 25 to 37, in R&D from 29.5 to 31, and in Sales from 37 to 39.5, reflecting varying age demographics across departments.



Marital Status Distribution by Department

- In HR, 60% are single and 40% married, whereas R&D has 62% single and 38% married. Sales shows a reverse trend with 40% single and 60% married, highlighting diverse marital compositions across departments.

