

Employee Attrition Project

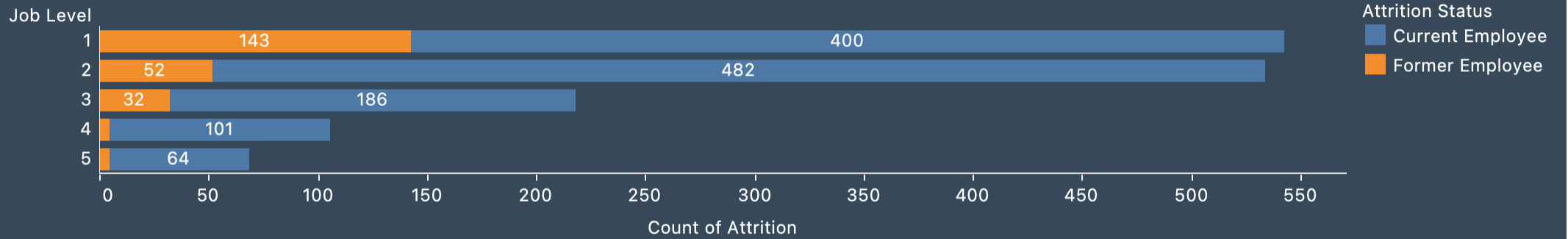
Applied Business Analytics (Fall 2023)

Attrition by Department

Department	Job Role	Attrition	
		No	Yes
Human Resources	Human Resources	76.92%	23.08%
	Manager	100.00%	
Research & Development	Healthcare Representat..	93.13%	6.87%
	Laboratory Technician	76.06%	23.94%
	Manager	94.44%	5.56%
	Manufacturing Director	93.10%	6.90%
	Research Director	97.50%	2.50%
Sales	Research Scientist	83.90%	16.10%
	Manager	94.59%	5.41%
	Sales Executive	82.52%	17.48%
	Sales Representative	60.24%	39.76%

Identify if certain departments have higher attrition rates.
 Analyze: Find out if the attrition rates in particular departments are greater.
 Recommendation: Look into the causes of attrition in specific departments and address any issues that arise, such as better management or career development opportunities.

Attrition by Job Level

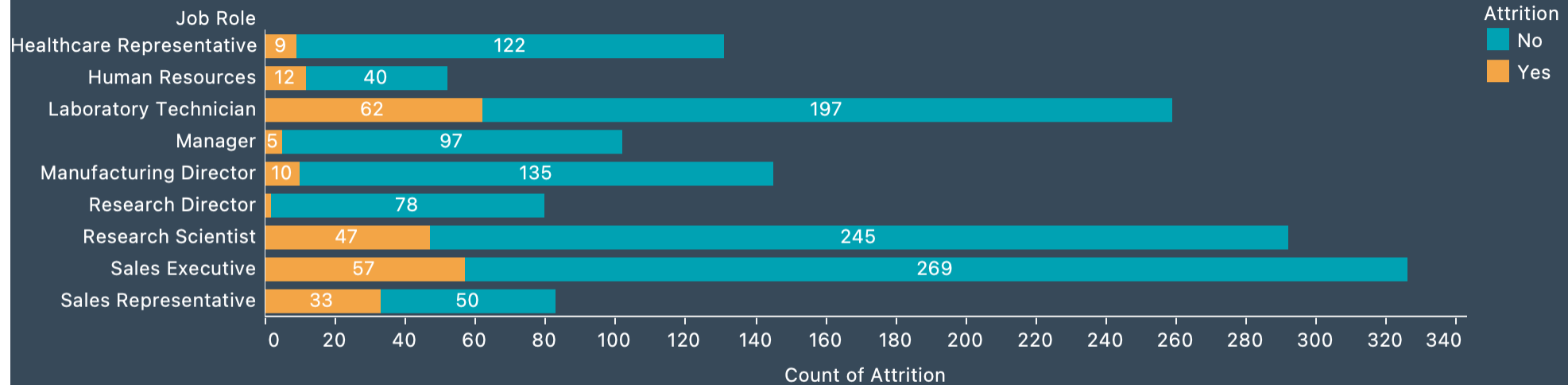


This can reveal if higher job levels have lower attrition rates.

Analysis: determine whether seniority influences attrition.

Recommendation: Create clear career advancement paths and promote from within to retain talent.

Job Role vs A

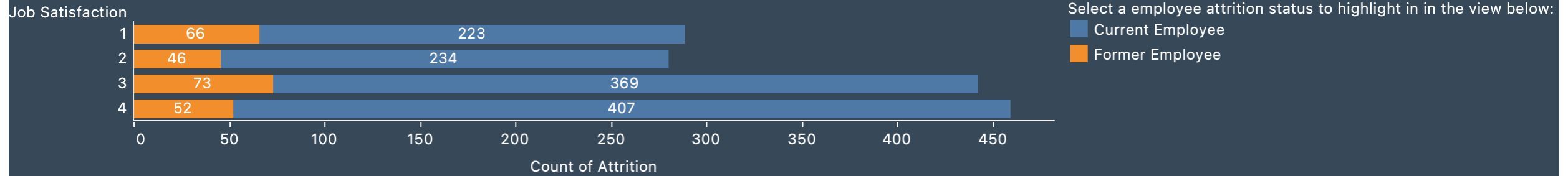


This can help you identify if specific roles have higher attrition.

Analysis: determine which employment roles have the highest attrition rates through analysis.

Recommendation: Address high-attrition issues, such as boosting job satisfaction or giving additional help.

Attrition by Job Satisfaction



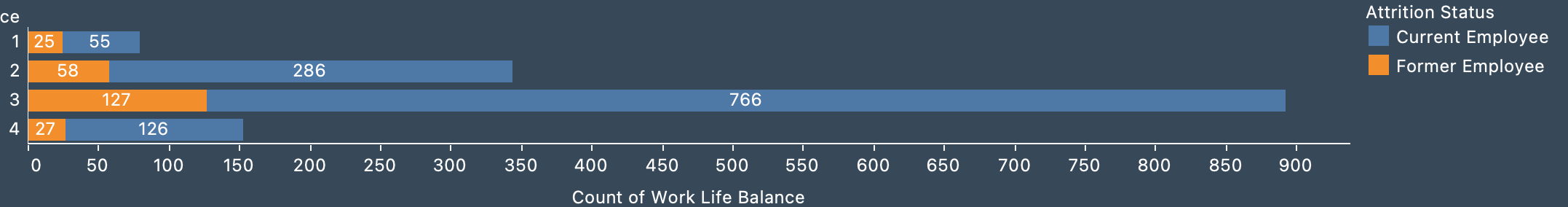
Determine if employees with lower job satisfaction are more likely to leave.

Analysis: whether job satisfaction affects attrition.

Recommendation: implement strategies to increase job happiness, such as addressing workload difficulties or boosting employee appreciation initiatives.

Work Life Balance

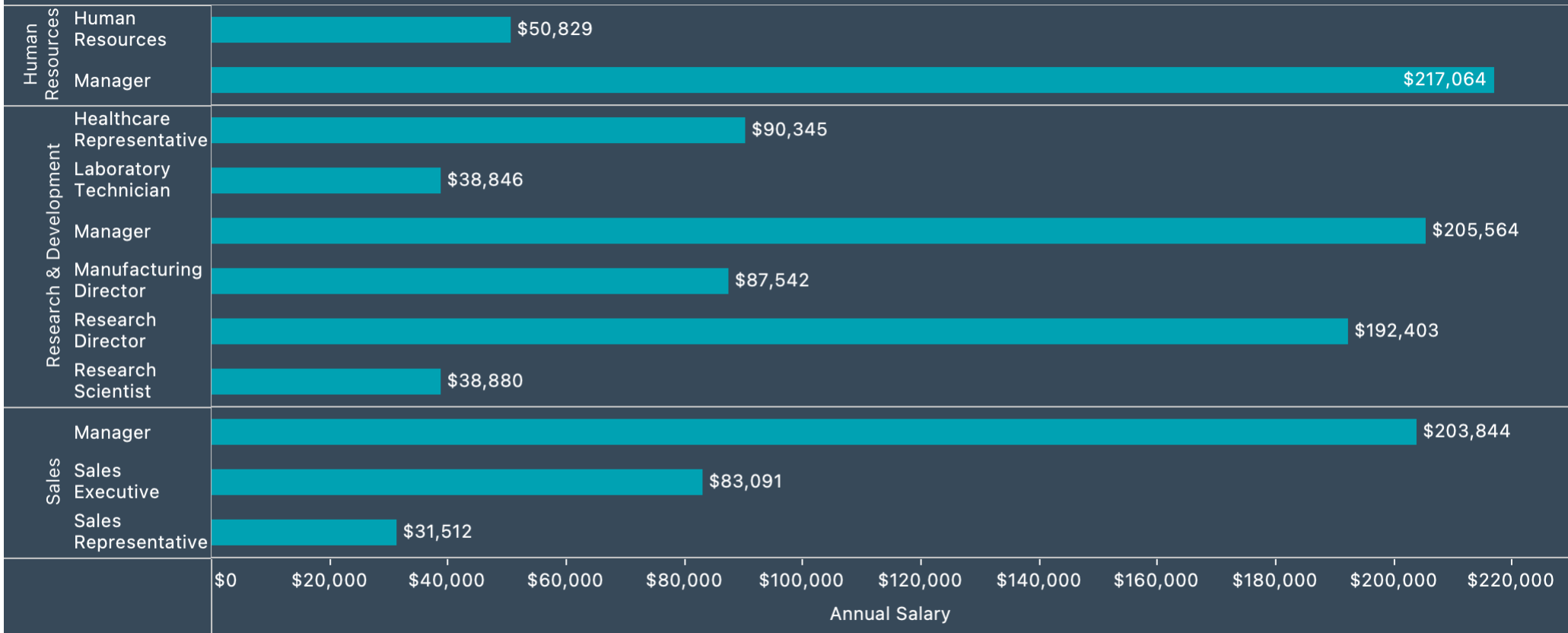
Work Life Balance



Analysis: The plot illustrates the distribution of work-life balance categories and their impact on attrition. Employees with "Bad" work-life balance are more likely to leave, while those with "Best" work-life balance have the lowest attrition.

Recommendation: To reduce attrition, the company should invest in work-life balance initiatives. This might include flexible working hours, remote work options, and clear communication regarding work hours and expectations.

Department by Annual Salary



Analysis: This plot compares annual salaries across different departments. It may show that certain departments, like Sales, have lower average salaries.

Recommendation: If salary discrepancies are identified, consider reviewing and adjusting compensation structures to ensure equity. Additionally, assess whether lower salaries in certain departments are contributing to attrition and address this issue.

Employee Attrition

Select Department:
All

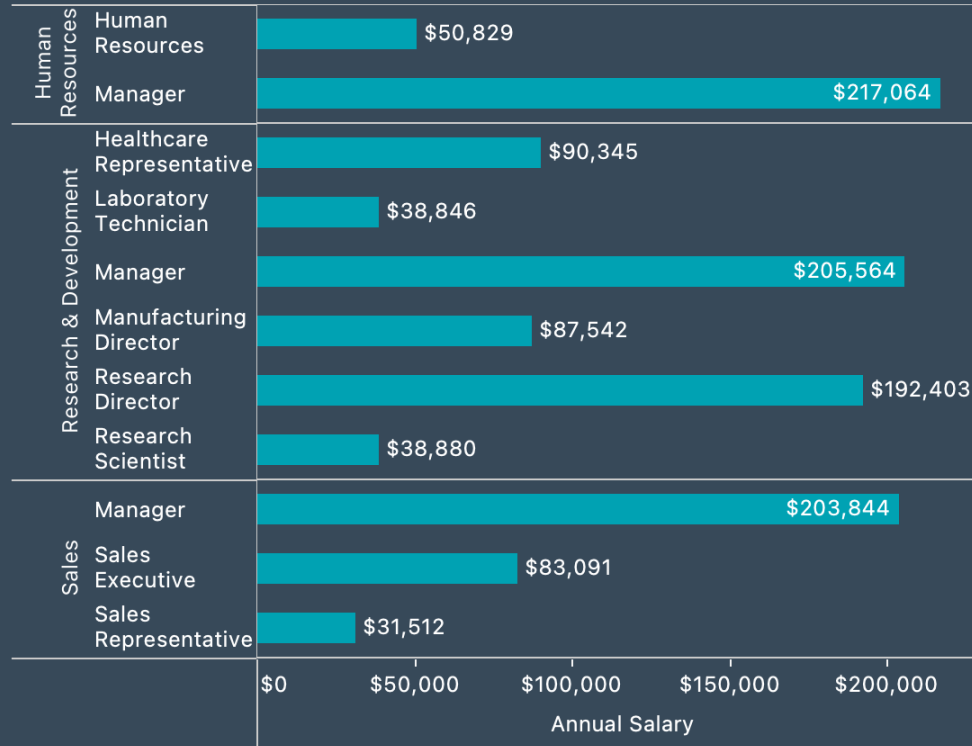
Select Age Group(s):
All

Select Gender:
All

Select a employee attrition status to highlight in in the view below:

- Current Employee
- Former Employee

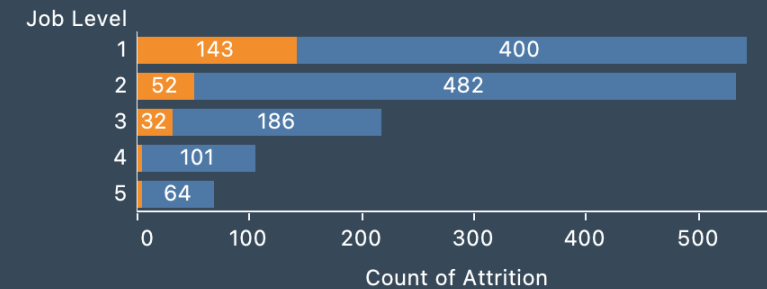
Department by Annual Salary



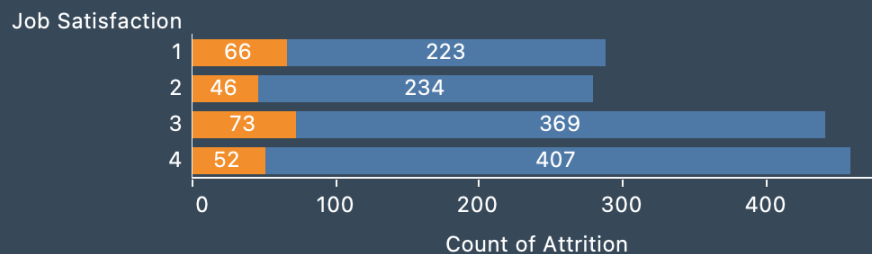
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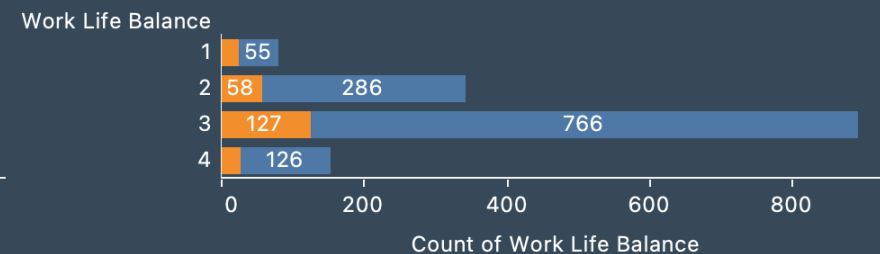
Attrition by Job Level



Attrition by Job Satisfaction



Work Life Balance



Employee Attrition Analysis

Hypothesis:

"The attrition rate in this fictional company is significantly influenced by job satisfaction and career growth opportunities, particularly for mid-level employees in the Sales department."

Story:

The data analysis suggests that employee attrition is a complex issue with several contributing factors. However, the primary drivers of attrition appear to be related to job satisfaction and career advancement. Several key findings support this hypothesis:

Job Satisfaction: The analysis indicates a clear correlation between job satisfaction levels and attrition. Employees reporting low job satisfaction are more likely to leave the company. This suggests that enhancing job satisfaction is crucial in reducing attrition.

Departmental Influence: The Sales department exhibits a notably higher attrition rate compared to other departments. Employees in Sales roles, such as sales representatives and sales managers, experience more significant attrition. This suggests that specific strategies are needed to address job satisfaction and retention in the Sales department.

Mid-Level Employees: Mid-level employees (Job Level 2 - Mid-Level Junior and Job Level 3 - Mid-Level Senior) have a higher attrition rate than entry-level employees. This group may feel a lack of career growth opportunities, leading to attrition. Implementing career development plans and advancement opportunities for mid-level employees is crucial to retaining this talent.

Work-Life Balance: Work-life balance is another factor contributing to attrition. Employees reporting poor work-life balance are more likely to leave the company. Implementing measures to enhance work-life balance, such as flexible working hours or remote work options, may help in retaining employees.

