

HR Analytics Dashboard Report

Subject Name: Business Analytics (23CAH-701)

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Project Title: HR Analytics Dashboard

The **HR Analytics Dashboard** is a data-driven tool that provides insights into employee attrition, demographics, and job satisfaction across various departments. By analyzing key metrics such as attrition rates, employee counts, age distribution, and job satisfaction ratings, HR managers and executives can better understand the factors influencing employee retention and satisfaction. This report offers a detailed analysis of each visual element in the dashboard, highlighting trends and areas that may benefit from targeted HR interventions.

1. Key Metrics Overview

This section provides an overview of essential metrics in the organization's workforce data, including total employee count, attrition count, attrition rate, active employees, and average age. These key metrics serve as a high-level snapshot of the workforce structure and attrition patterns.

- **Employee Count:** 1,470
- **Attrition Count:** 237
- **Attrition Rate:** 16.12%
- **Active Employees:** 1,233
- **Average Age:** 37

The attrition rate of 16.12% indicates that the company has experienced notable employee turnover, which will be analyzed in more depth in the following sections.

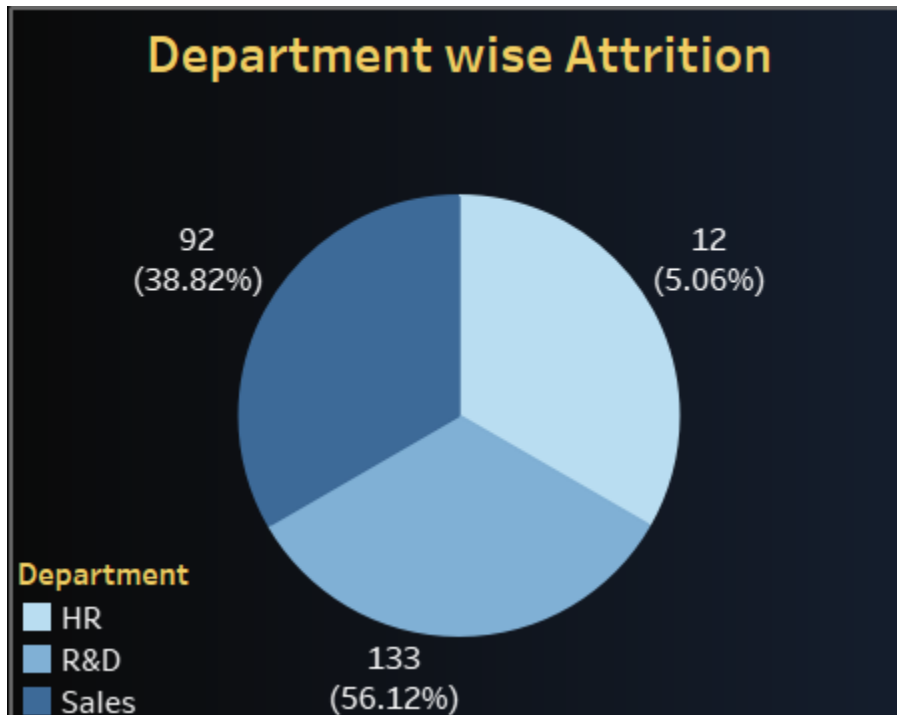
2. Graph Analysis

Each visualization on the dashboard offers unique insights into various aspects of employee demographics, attrition, and satisfaction. Below, each graph is described in detail, along with its potential implications for HR strategy.

2.1 Department-wise Attrition

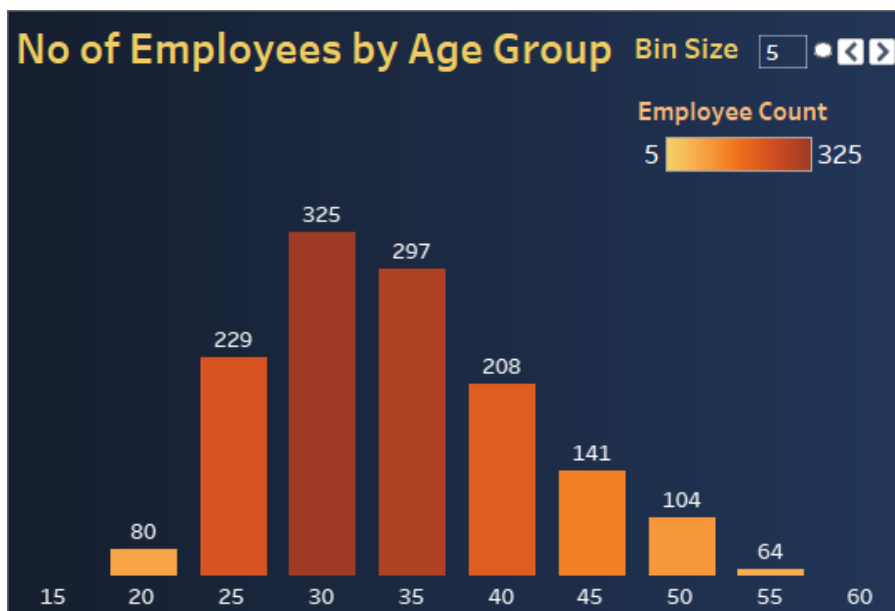
- **Description:** The pie chart shows the proportion of employee attrition across three departments: HR, R&D, and Sales.
- **Analysis:**
 - **R&D** accounts for the highest attrition, with 133 employees (56.12% of total attrition).
 - **Sales** has the second-highest attrition at 92 employees (38.82%).
 - **HR** has the lowest attrition, with only 12 employees (5.06%).
- **Implications:** High attrition in R&D could indicate job dissatisfaction or high stress in this department, possibly due to work demands or limited growth opportunities.

- Screenshot:



2.2 Number of Employees by Age Group

- **Description:** This bar chart breaks down employee counts by age groups, from 20-25 up to 55-60.
- **Analysis:**
 - The **30-35** age group has the highest representation, with **325** employees, followed closely by the **35-40** age group with **297** employees.
 - The **55-60** age group has the fewest employees, with only **64**.
- **Implications:** The dominance of younger age groups (30-40) could mean a workforce with potential for long-term retention, but also highlights the need to create a sustainable work environment that accommodates different career stages.
- **Screenshot :**



2.3 Job Satisfaction Rating by Job Role

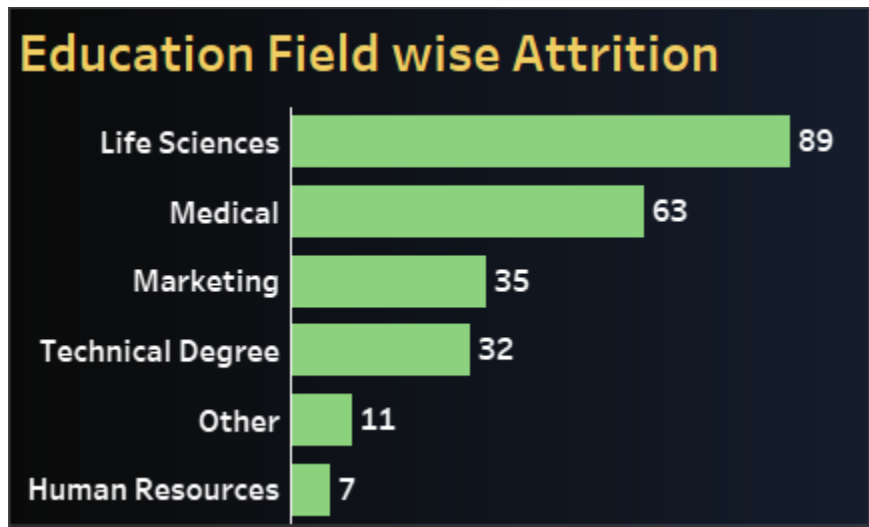
- **Description:** The heatmap shows job satisfaction ratings (1 to 4) across different job roles, with each cell color-coded to represent satisfaction levels.
- **Analysis:**
 - **Sales Executives** and **Research Scientists** report higher satisfaction levels, with most employees rating their satisfaction at level 4.
 - **Healthcare Representatives** and **Laboratory Technicians** show a more varied distribution, with significant numbers at lower satisfaction levels.
- **Implications:** High satisfaction among Sales Executives and Research Scientists suggests effective management or fulfilling job roles, which could serve as models for other departments.
- **Screenshot :**

Job Satisfaction Rating					
Job Role	Job Satisfaction				Grand T..
	1	2	3	4	
Healthcare Represe..	26	19	43	43	131
Human Resources	10	16	13	13	52
Laboratory Technici..	56	48	75	80	259
Manager	21	21	27	33	102
Manufacturing Direc..	26	32	49	38	145
Research Director	15	16	27	22	80
Research Scientist	54	53	90	95	292
Sales Executive	69	54	91	112	326
Sales Representative	12	21	27	23	83
Grand Total	289	280	442	459	1,470

2.4 Education Field-wise Attrition

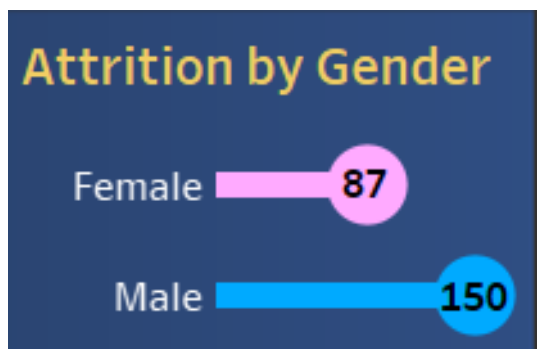
- **Description:** This horizontal bar chart depicts attrition based on employees' education fields.
- **Analysis:**
 - **Life Sciences** has the highest attrition, with **89** employees leaving, followed by the **Medical** field with **63**.
 - **Human Resources** shows the lowest attrition, with only **7** employees leaving.

- **Implications:** The high attrition rates in Life Sciences and Medical fields may indicate a demand for these skills in competing organizations or dissatisfaction related to role fit.
- **Screenshot :**



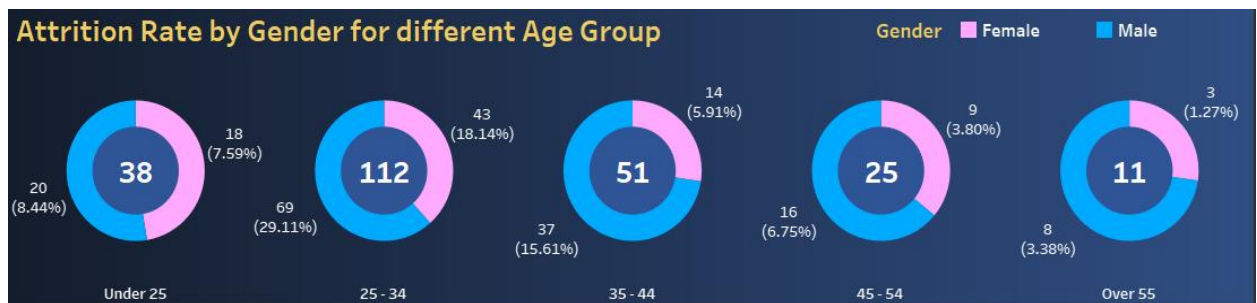
2.5 Attrition by Gender

- **Description:** This bar graph displays attrition by gender, showing the proportion of male and female employees who have left the company.
- **Analysis:**
 - **Male employees** have a higher attrition count (150) than female employees (87).
- **Implications:** The gender disparity in attrition could be analyzed further to identify if workplace policies, work-life balance, or other factors may be impacting one gender more than the other.
- **Screenshot :**



2.6 Attrition Rate by Gender for Different Age Groups

- **Description:** A series of donut charts show attrition rates by gender for specific age groups, offering a detailed view of gender-based attrition trends across different career stages.
- **Analysis:**
 - The **25-34 age group** has the highest attrition rate, with males showing a significantly higher rate than females.
 - **Attrition rates** decline notably for employees above **45 years**.
- **Implications:** The high attrition rate in younger age groups (especially 25-34) may indicate a need for increased engagement or development opportunities tailored to early-career employees.
- **Screenshot :**



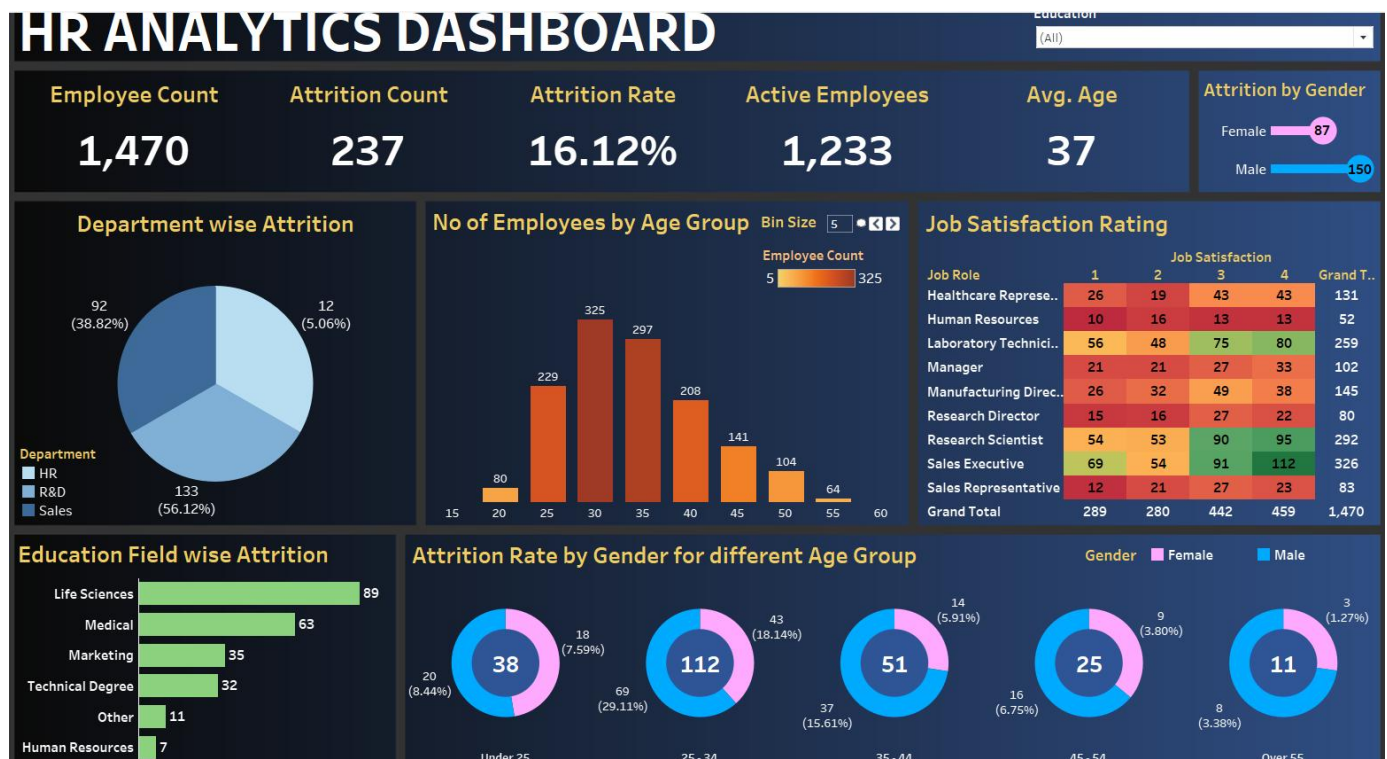
3. Recommendations

Based on the insights derived from the dashboard, the following recommendations can be made to improve employee retention and satisfaction:

1. **Develop Retention Strategies for High-Attrition Departments:** Focus on departments like R&D and Sales, where attrition is notably higher. Consider conducting exit interviews to identify the underlying reasons and implementing targeted programs to address these issues.
2. **Enhance Engagement for Younger Age Groups:** Since attrition is highest among employees aged 25-34, consider initiatives such as career development programs, mentorship, or flexible work options tailored to early-career professionals.
3. **Create Job Satisfaction Models:** Use the practices in Sales and Research Science departments, where satisfaction levels are high, as models. Identify the factors contributing to high satisfaction and explore how these can be replicated in other job roles.

4. **Address Gender-Based Disparities:** Given the higher attrition among male employees, explore if there are role-specific or department-specific challenges that impact men more than women. Consider initiatives that promote work-life balance and equal opportunities.
5. **Career Growth Opportunities for Life Sciences and Medical Professionals:** Since these education fields show high attrition, ensure that employees in these fields have clear growth trajectories and are engaged in meaningful, challenging work that aligns with their expertise.

4. Dashboard



5. Conclusion

The HR Analytics Dashboard offers a valuable perspective on employee demographics, attrition, and satisfaction trends. Key findings reveal high attrition in certain departments and age groups, varied job satisfaction by role, and significant attrition rates among male employees. By leveraging these insights, HR teams can implement targeted interventions to improve employee retention and satisfaction, ultimately enhancing organizational performance. This report provides the foundation for developing data-driven HR strategies that support a healthy, productive, and engaged workforce.