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# EMPLOYEE ATTRITION

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PROJECT REPORT



DECEMBER 11, 2024

TECHNOCOLABS  
Indore

## ANALYSIS

### OVERVIEW:

- 1) Data is already well defined.
- 2) There are no duplicate values in the dataset.
- 3) There are no missing values in the dataset.

### EXPLORATORY DATA ANALYSIS(EDA):

- 1) Shape of the data set: Rows-1470, Columns-35
- 2) Attrition Trends:

- 1) **By Department:**

- HR: 12 employees with attrition, 51 without attrition.
- R&D: 133 employees with attrition, 828 without attrition.
- Sales: 92 employees with attrition, 354 without attrition.

- 2) **By Job Role:**

- **Highest Attrition:**
  - Laboratory Technicians: 62 employees.
  - Sales Representatives: 33 employees.
  - Research Scientists: 47 employees.
- **Lowest Attrition:**
  - Research Directors: 2 employees.
  - Managers: 5 employees.

- 3) **Key Metrics:**

- 1) **Average Age:**

- With Attrition: 33.6 years.
- Without Attrition: 37.6 years.

- 2) **Average Tenure at Company:**

- With Attrition: 5.1 years.
- Without Attrition: 7.4 years.

- 3) **Average Monthly Income:**

- With Attrition: ₹4,787.
- Without Attrition: ₹6,832.

#### 4) Satisfaction Levels:

- With Attrition:
  - Job Satisfaction: 2.47.
  - Environment Satisfaction: 2.46.
- Without Attrition:
  - Job Satisfaction: 2.78.
  - Environmental Satisfaction: 2.77.

#### *INSIGHTS:*

- ❖ Attrition is notably higher among Laboratory Technicians, Sales Representatives, and Research Scientists.
- ❖ Employees experiencing attrition have lower job and environment satisfaction scores.
- ❖ Employees with higher monthly incomes and longer tenure are less likely to leave.