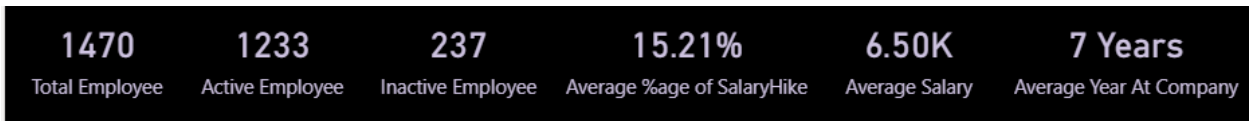
ZENVY AI POWERED PAYROLL HR INTELLIGENCE DASHBOARD

KPI INFO

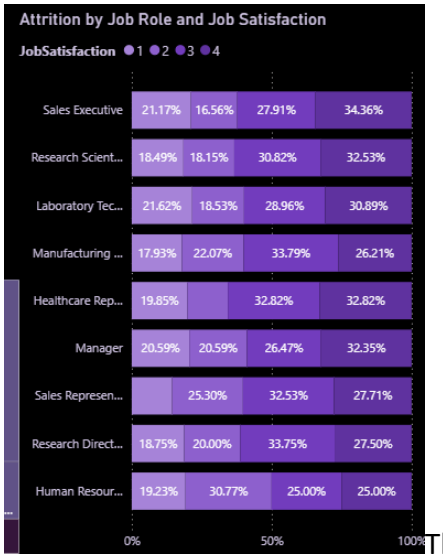
POWER BI

1. 

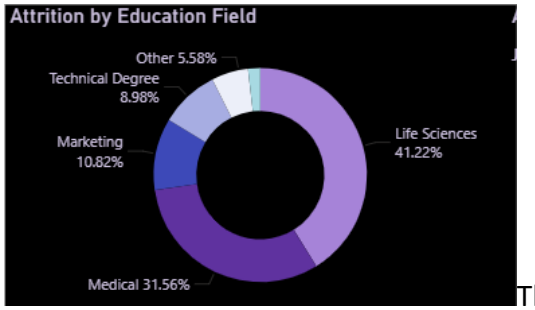

```
Active Employee = CALCULATE([Total Employee],FILTER('clean HR data','clean HR data'[Attrition] = "No" ))

Inactive Employee = CALCULATE([Total Employee],FILTER('clean HR data','clean HR data'[Attrition] = "Yes" ))
```

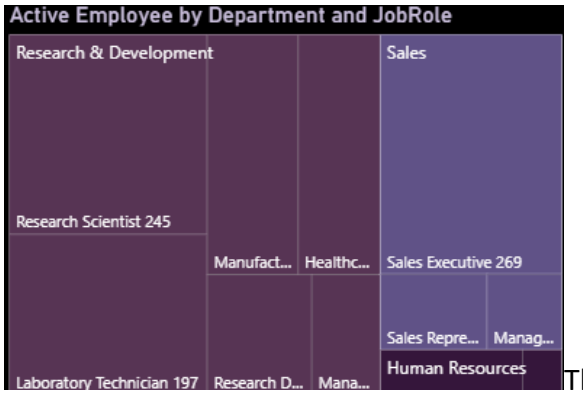
Active Employee: Count of employees with “Attrition = No”
Inactive Employee: Count of employees with “Attrition = Yes”
Total Employee: Sum of active and inactive employees
Average %age of Salary-Hike: Mean percentage salary increases across employees
Average Salary: Mean annual compensation
Average Year at Company: Mean tenure in years.

2. 

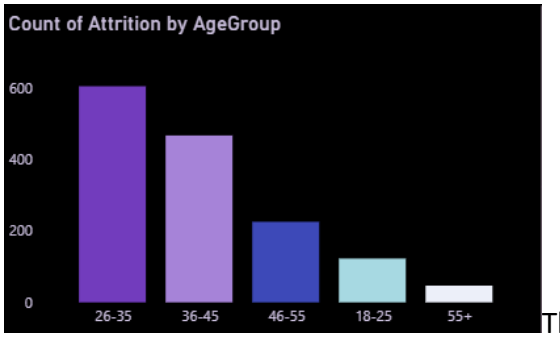
This KPI visualizes the distribution of employee attrition rates by job role, segmented across four levels of job satisfaction (1 to 4), showing the percentage of employees who left within each satisfaction tier per role.

3. 

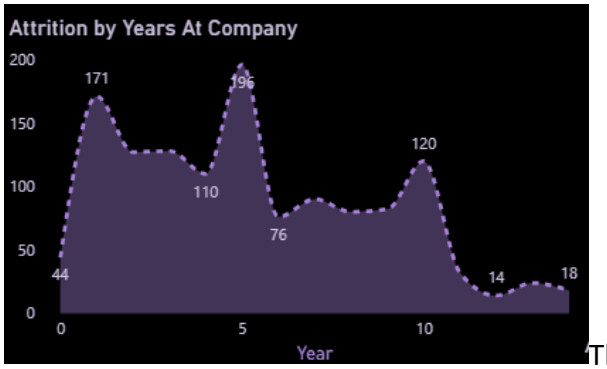
This KPI shows the percentage breakdown of employee attrition by education field, highlighting that Life Sciences (41.22%) and Medical (31.56%) fields account for the largest shares of departing employees.

4. 

This KPI visualizes the count of active employees segmented by department and job role, using a tree map to show relative headcount sizes—such as 245 Research Scientists in R&D and 269 Sales Executives in Sales.

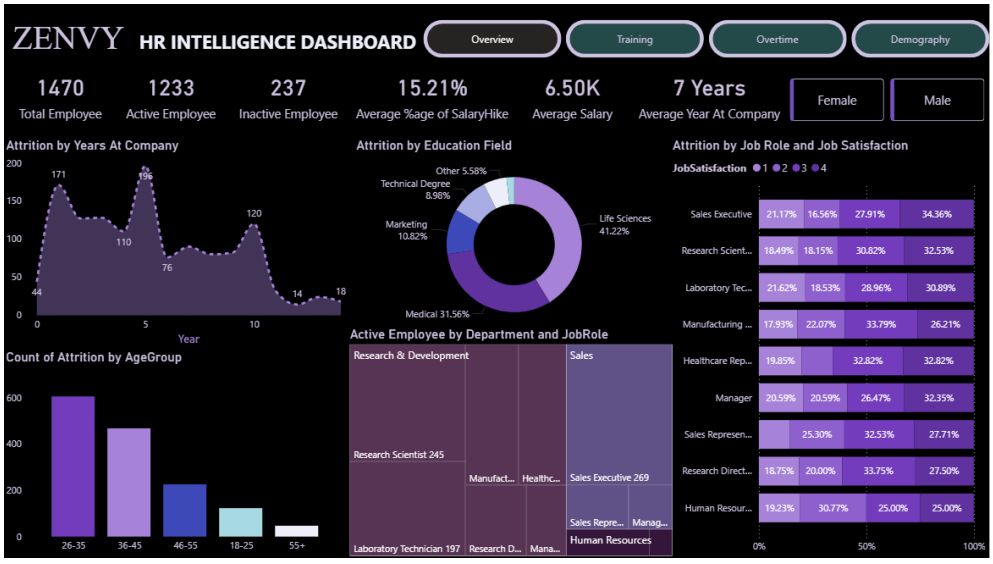
5. 

This KPI displays the absolute number of employee attritions grouped by age bracket, revealing that the 26–35 age group has the highest turnover, followed by 36–45, significantly fewer departures in older and younger groups.

6. 

This KPI tracks the count of employee attritions by tenure (years at company), showing peaks at 1 year (171), 5 years (196), and 10 years (120), with sharp declines beyond 10 years, indicating higher turnover among newer and mid-tenure employees.

SUMMARY OF THE COMPLETE DASHBOARD: -



ZENVY HR Intelligence Dashboard KPIs:

OVERVIEW consist of KPI's like Total Employees, Total Hires, Total Attrition, Attrition Rate Average Salary, Average Tenure

Attrition Visuals:

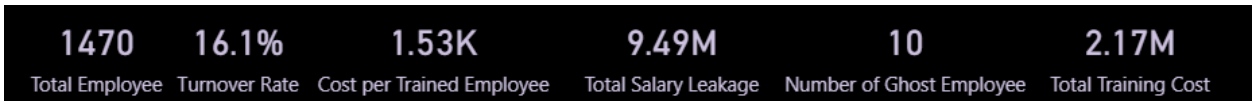
Attrition Count by Year at Company (Area chart)

Active Employees by Department and Age Group (Tree map)

Education Breakdown (donut)

Attrition by Job Role and Job Satisfaction (stacked bars)

Attrition by Age Group (Bar) and a gender slicer

1. 


```
Total Training Cost =
SUMX(
    'Clean HR data',
    'Clean HR data'[TrainingTimesLastYear] * 8 * 'Clean HR data'[HourlyRate]
)

Cost per Trained Employee =
DIVIDE(
    [Total Training Cost],
    CALCULATE(
        COUNTROWS('Clean HR data'),
        'Clean HR data'[TrainingTimesLastYear] > 0
    )
)
Turnover Rate = DIVIDE([Inactive Employee], [Total Employee])
```

This KPI set measures workforce efficiency and cost impact: Total Training Cost = sum of last year's training hours × 8 × hourly rate Total Training Cost is the estimated total expense incurred by the company for employee training over a specific period (e.g., last year).

Turnover Rate = inactive employees ÷ total employees Turnover Rate is the percentage of employees who left the company (inactive) during a given period

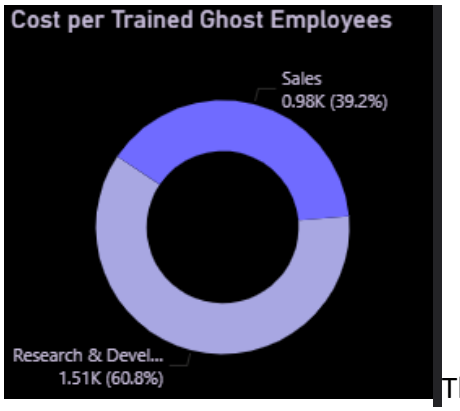
Cost per Trained Employee = total training cost ÷ count of trained employees Cost per Trained Employee is the average training expense allocated to each employee who received training during the period

Total salary leakage is the salary being paid to fake employees, ghost employees are the fake employees.

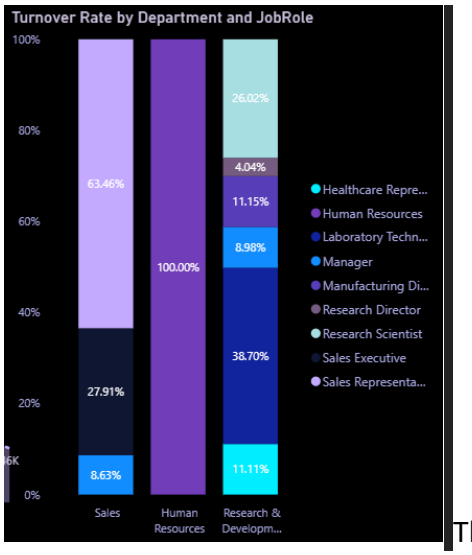
2. **Ghost Employee**

EmpID	Sum of SalaryLeakage	Sum of YearsAtCompany	First Department
RM1461	509340	5	Research & Development
RM1462	597096	3	Sales
RM1463	2118720	20	Sales
RM1464	408996	9	Research & Development
RM1465	1026144	4	Sales
RM1466	737400	5	Research & Development
RM1467	1802388	7	Research & Development
RM1468	372528	6	Research & Development
RM1469	1430244	9	Sales
RM1470	490944	4	Research & Development

This KPI identifies "Ghost Employees" — active payroll records with no corresponding work output — by listing employee IDs, their accumulated salary leakage (unjustified pay), tenure, and first department, exposing potential fraud or administrative errors in payroll.

3. 

This KPI breaks down the total cost of training “ghost employees” (inactive or fraudulent payroll entries) by department, showing Research & Development bears 60.8% and Sales 39.2% of the training cost allocated to non-productive staff.

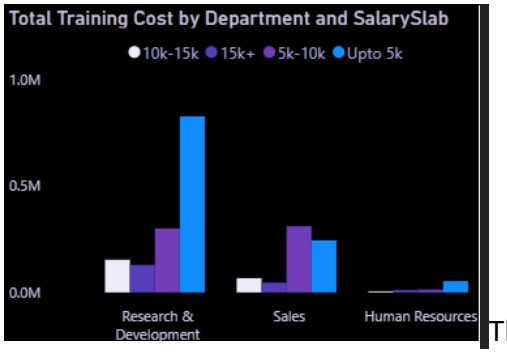
4. 

This KPI visualizes the percentage breakdown of employee turnover by department and job role, revealing that Human Resources has 100% turnover (all employees left), while Sales and Research & Development show segmented attrition rates across roles like Sales Executive, Manager, and Research Scientist.

5. 

This KPI tracks the average training cost per employee by tenure (years at company), showing fluctuating investment —

peaking at $1.86K for new hires (Year 0) and dipping to $1.34K around Year 7, before rising again to $1.60K at Year 11.

6. 

This KPI breaks down total training cost by department and employee salary bracket, revealing that Research & Development incurs the highest training spend — especially among employees earning 10k–15k and 15k+ — while Sales and Human Resources show significantly lower investment across all salary tiers.

SUMMARY OF THE COMPLETE DASHBOARD: -

ZENVY HR Intelligence Dashboard KPIs

Training Total Employees, Turnover Rate, Cost per Trained Employee, Total Salary Leakage, Number of Ghost Employee, Total Training Cost

Turnover and training Visuals:

Ghost Employee (Matrix Table)

Cost per Trained Ghost Employees (donut)

By Department and salary slab and department (bar)

Cost per Trained Employee by Years at Company (Area)

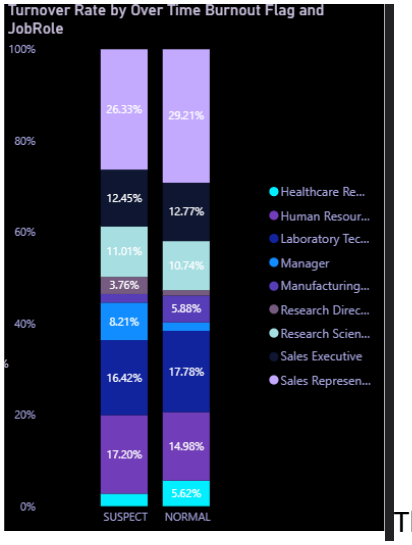
Turnover Rate by Department and job role (stacked bars) and slicer for gender

1. 

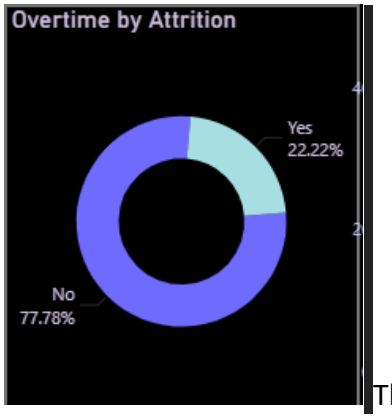

```
Absenteeism % =
DIVIDE(
    CALCULATE(
        COUNTROWS('Clean HR data'),
        'Clean HR data'[JobInvolvement] <= 2,
        'Clean HR data'[OverTime] = "Yes"
    ),
    COUNTROWS('Clean HR data')
) * 100
```

```
Absenteeism_With_Text = ROUND([Absenteeism %],1)&"%"
```

Absenteeism refers to the habitual or frequent absence of an employee from work without a valid reason. This KPI displays key workforce tenure and attendance metrics: average time since last promotion (2.19 years), absenteeism rate (8.8%), and average tenure in current company (4.23 years), offering insight into employee engagement, retention, and operational reliability.

2. 

This KPI compares employee turnover rates split by “Suspect” (high burnout risk) vs. “Normal” (low burnout risk) categories, broken down by job role revealing higher attrition among at-risk employees, especially in roles like Sales Executive and Manager under the “Suspect” flag.

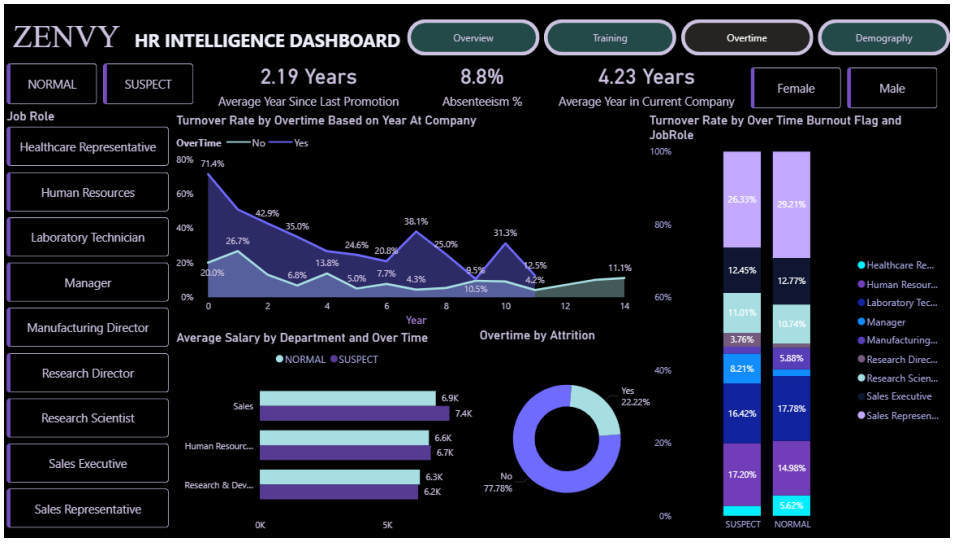
3. 

This KPI shows that 22.22% of employees who left the company (attrition) had recorded overtime, while 77.78% did not suggesting most turnover occurred among non-overtime workers, potentially indicating burnout isn't the primary driver of attrition in this dataset.

4. 

This KPI compares average salaries by department (Sales, Human Resources, Research & Development) segmented into "Normal" and "Suspect" (potential burnout risk) employee groups, revealing that "Suspect" employees consistently earn slightly higher salaries than their "Normal" counterparts within each department.

SUMMARY OF THE COMPLETE DASHBOARD: -



ZENVY HR Intelligence Dashboard KPIs

Salary: Average Years Since Last Promotion, Absenteeism Rate, Average Years at Company

Overtime Visuals:

Turnover Rate by Overtime Based on Year at Company (Area Chart)

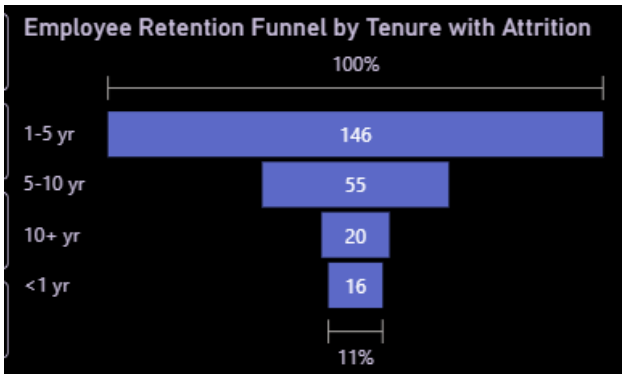
Turnover Rate by Overtime Burnout Flag and Job Role (Stacked Bar)

Overtime by Attrition(donut)

Average Salary by Department and Overtime (Bar) and slicer for Job role, gender and Overtime burnout flag

1. 

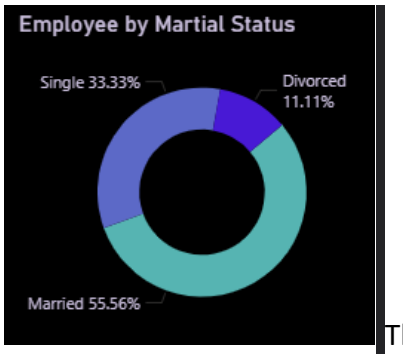
This KPI summarizes key employee career and tenure metrics: average of 2.69 previous companies worked, age 36.92 years, 11.28 total working years, and 3.96 years under current manager — providing insight into workforce experience, stability, and leadership continuity.

2. 

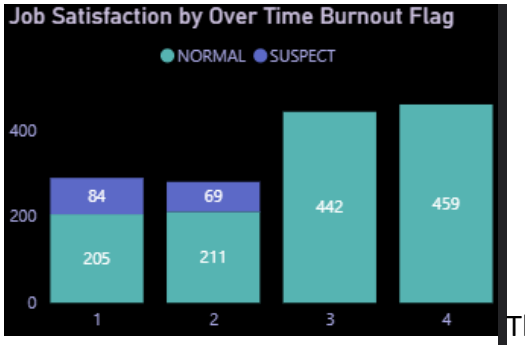

```
Tenure Attrition Count =
CALCULATE(
    COUNTROWS('Clean HR data'),
    'Clean HR data'[Attrition] = "Yes"
)
```

```
Tenure Group =
SWITCH(
    TRUE(),
    'Clean HR data'[YearsAtCompany] < 1, "<1 yr",
    'Clean HR data'[YearsAtCompany] <= 5, "1-5 yr",
    'Clean HR data'[YearsAtCompany] <= 10, "5-10 yr",
    "10+ yr"
)
```

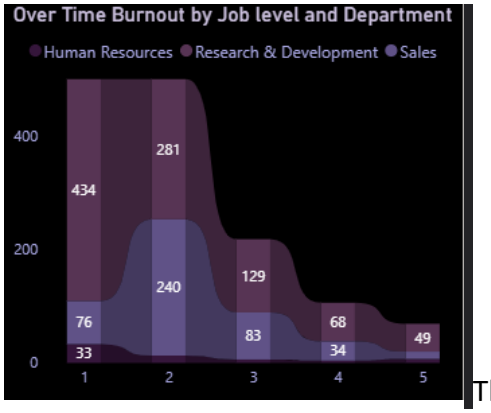
This KPI defines employee tenure groups (<1 yr, 1–5 yr, 5–10 yr, 10+ yr) and visualizes retention as a funnel, showing attrition counts per group — with 146 leaving in 1–5 years (largest loss), followed by 55 in 5–10 years, 20 in 10+ years, and 16 in <1 year — revealing mid-tenure employees are most at risk of attrition.

3. 

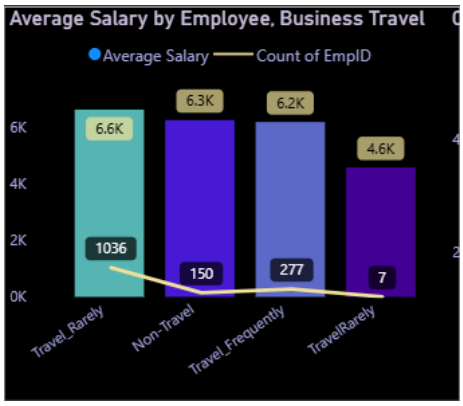
This KPI displays the distribution of employees by marital status, showing that 55.56% are married, 33.33% are single, and 11.11% are divorced — offering insight into workforce demographic composition.

4. 

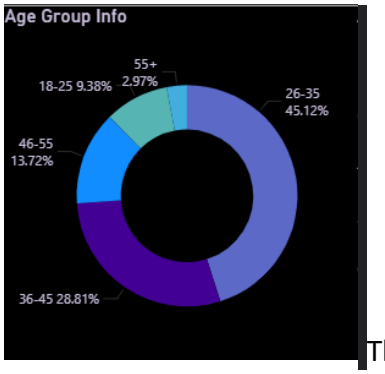
This KPI compares job satisfaction levels (1 to 4) between “Normal” and “Suspect” (burnout-risk) employees, revealing that higher satisfaction (levels 3–4) is more common among “Normal” staff, while “Suspect” employees are disproportionately concentrated in lower satisfaction tiers (1–2), signaling burnout correlates with dissatisfaction.

5. 

This KPI visualizes overtime burnout risk by job level (1–5) and department, showing that lower job levels in Human Resources and Research & Development have the highest burnout counts (e.g., 434 at Level 1), while Sales shows consistently lower burnout across all levels — indicating higher pressure on entry/mid-level non-sales roles.

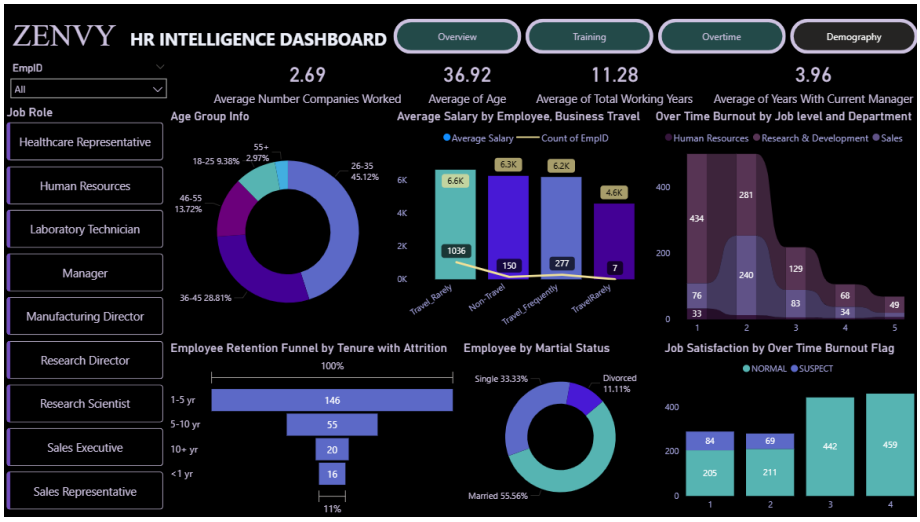
6. 

This KPI compares average salary and employee count across four business travel categories — revealing that “Travel Rarely” employees earn the highest average salary ($6.6K) with the largest headcount (1,036), while “Travel Frequently” roles have lower pay ($6.2K) and fewer staff (277), suggesting a potential trade-off between travel demand and compensation.

7. 

This KPI displays the demographic distribution of employees by age group, showing that the 26–35 cohort makes up the largest share (45.12%), followed by 36–45 (28.81%), with progressively smaller proportions in older and younger groups — highlighting a predominantly mid-career workforce.

SUMMARY OF THE COMPLETE DASHBOARD: -



ZENVY HR Intelligence Dashboard KPIs

Demographics Average number company worked, Average of age, Average of total working years, Average of Years with Current Manager

Demographic Visual:

Age group info(donut)

Employee Retention Funnel by tenure with attrition (Funnel chart)

Average salary by employee and business Travel (bar and line chart)

Overtime Burnout by Job level and department (Ribbon chart)

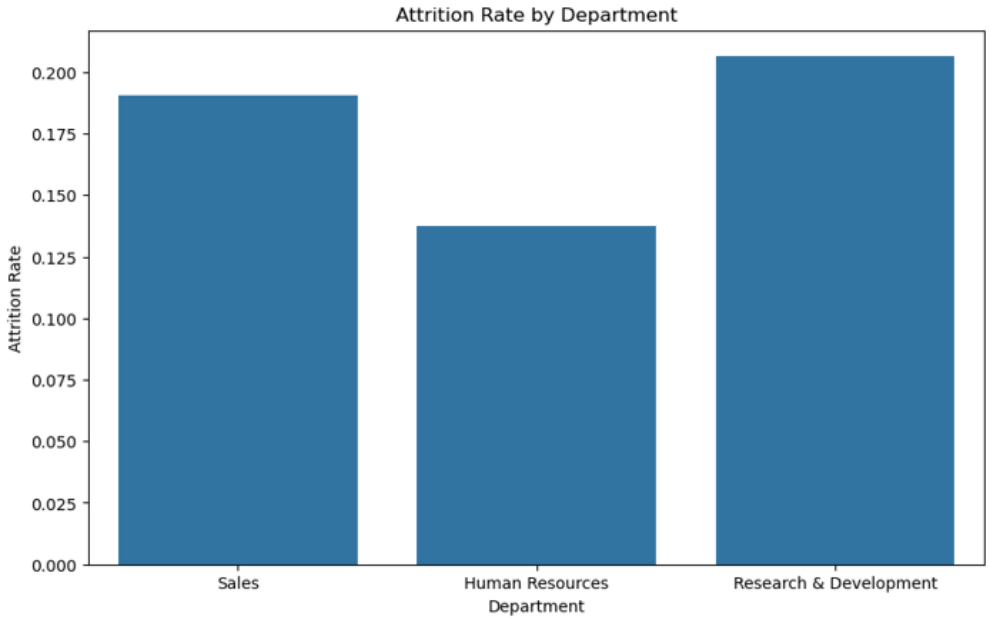
Employee by Martial status (donut)

Job Satisfaction by Overtime Burnout Flag (stacked bar) with slicer for job role and Employee ID

PYTHON

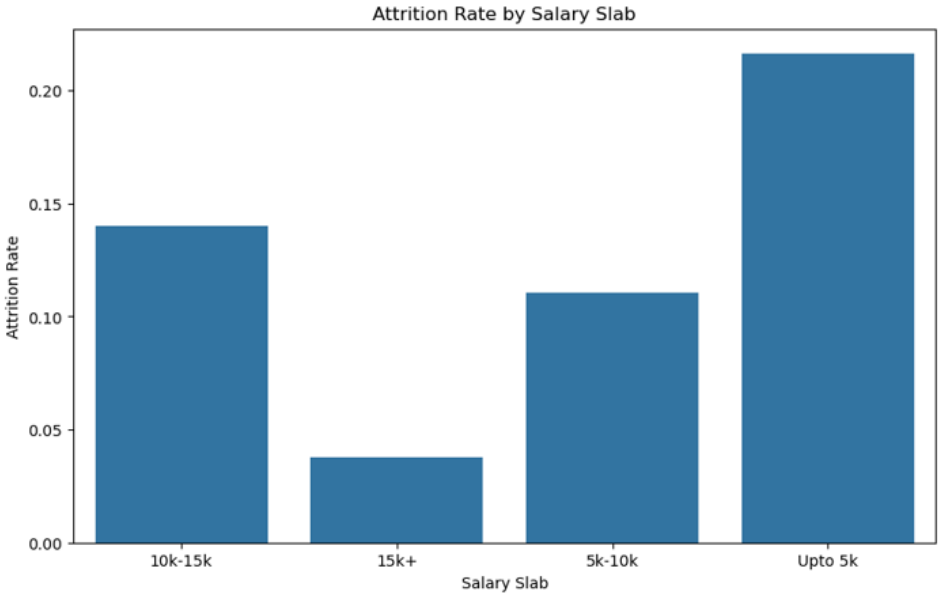
Attrition

Aim to understand "who leaves" using group by columns First need to convert Attrition dtype from string to int())



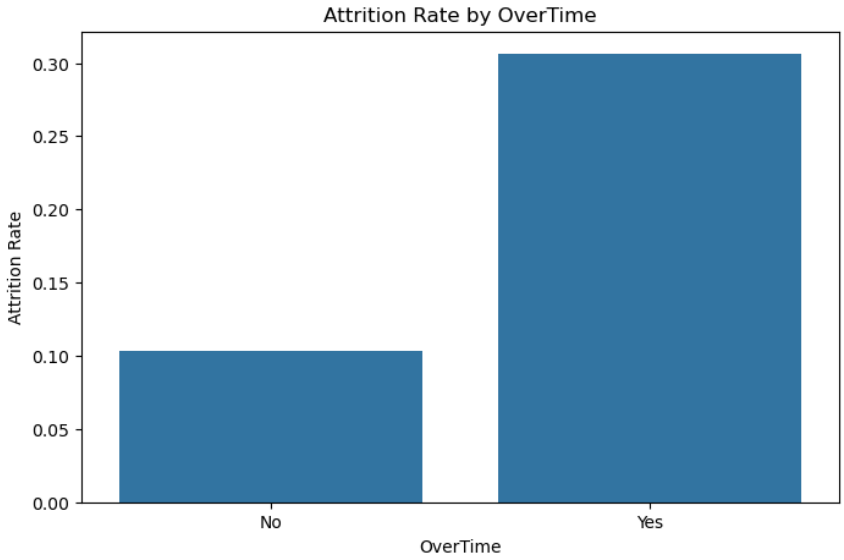
ATTRITION BY DEPARTMENT

shows that R&D has more rate of attrition signifies more chance of leaving



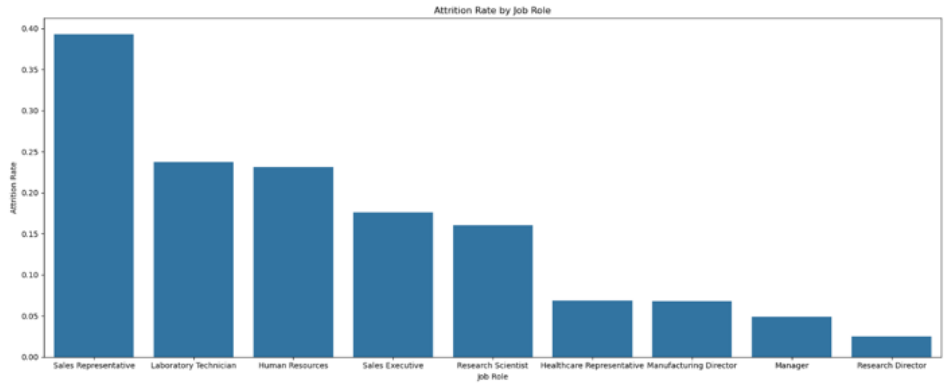
ATTRITION BY SALARYSLAB

shows that employee with salary slab of upto 5k has more rate of attrition signifies more chance of leaving while interestingly 10k-15k slab ones are more lenient towards leaving than 5k-10k



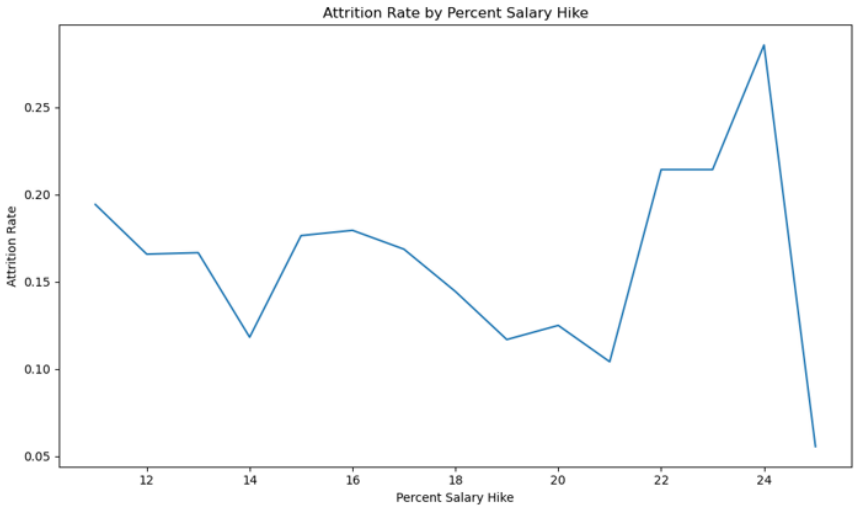
ATTRITION BY OVERTIME

shows a quiet obvious visual overtime employees are most forward in this race of leaving



ATTRITION BY JOB ROLE

shows that Sales Representative are most likely to be attrition prone while research director is the least among the role



ATTRITION BY % OF SALARY HIKE

shows interesting insight more the % of salary hike more are the chances of leaving exception is 25% of hike as it is nearly not possible for the company to give such a big hike at once.(21-24%) tends to has more attrition chance than other

- THANK YOU -

PRESENTED BY

ARIJEET MUKHERJEE