INX Future Inc Employee Performance Dashboard.

In this project an Employee Performance Analysis Dashboard is made using Power BI.

PROJECT OBJECTIVE:

To initiate a data analysis project, which analyses the current employee data and finds the core underlying causes of the performance issues.

DATASET USED:

Employee Performance Dataset.

PROJECT OPERATION:

1. Key Metrics at a Glance:

- Count of Employees: Displays the total number of employees, 1200.
- Avg Years: Shows that the average number of years an employee has worked at the company is 7.1 years.
- Avg Age: The average employee age is 37 years.
- Avg Salary Hike %: The average salary hike percentage across the company is 15%.
- Attrition Rate: The overall attrition rate is 15%, indicating the proportion of employees leaving the company.

2. Filters and Segmentation:

- Attrition Filter: This allows users to filter the dashboard to focus on employees who have left the company (yes) or all employees.
- Departments Dropdown: Allows filtering by department for a more specific view.

3. Charts used:

- Attrition by Education (Pie Chart): Shows employee attrition by educational background. Life Sciences (41%) and Medical (32%) have the highest attrition rates.
- Attrition by Job Role (Bar Chart): Highlights the job roles with the highest turnover. Sales Executives (270) and Developers (236) lead in attrition.
- Attrition by Gender (Bar Chart): Compares attrition between males (725) and females (475), with males showing a higher attrition rate.
- Attrition by Age (Bar Chart): Displays attrition by age groups. Employees aged 34-38 have the highest attrition.

- Attrition by Years at the Company (Line Chart): Shows that most employees leave within the first two years, with attrition decreasing sharply afterward.
- Attrition by Salary Hike (Bar Chart): Indicates that employees with 10-20% salary hikes have the highest attrition rates.
- Employee Job Role Analysis (Table): Detailed breakdown of who stayed and left by job role, showing higher retention among some roles like Managers and Business Analysts.

4. DAX Queries used:

- Avg Years =

  AVERAGE(INX_Future_Inc_Employee_Perform[ExperienceYearsAtThisCompany])

- Attrition Rate = DIVIDE(COUNTROWS(FILTER(INX_Future_Inc_Employee_Perform,

  INX_Future_Inc_Employee_Perform[Attrition]= "Yes")),

  COUNTROWS(INX_Future_Inc_Employee_Perform))

- Count of Employees = COUNTROWS(INX_Future_Inc_Employee_Perform)

- Avg Age = AVERAGE(INX_Future_Inc_Employee_Perform[Age])

QUESTIONS (KPIS):

- Does educational level responsible for the attrition of employees?

  Yes, educational level does seem to play a role in employee attrition. The chart shows that employees from **Life Sciences** (41%) and **Medical** (32%) backgrounds account for the majority of the attrition. This suggests that employees with these degrees are more likely to leave compared to those with **Technical Degrees** (8%) or **Marketing Degrees** (11%). Possible reasons could be job-role mismatches, industry demands, or better opportunities in their respective fields.

- Which age group of employees has the maximum attrition?

  395 employees aged **34** and **384 employees** aged **38** have left the company, making this the highest attrition group.

- Are the employees unsatisfied with the specific job role?

  Yes, the **"Attrition by Job Role"** chart suggests that certain job roles experience higher attrition, which may indicate dissatisfaction:

  - **Sales Executives** have the highest attrition, with **270 employees** leaving.
  - **Developers** also show a significant number of departures, with **236 employees** leaving.

- Which top 5 job role indicates the maximum attrition of employees?

  The top 5 job roles with the maximum attrition, as shown in the **Attrition by Job Role** chart, are:

- **Sales Executive** – 270 employees

- **Developer** – 236 employees

- **Manager R&D** – 94 employees

- **Research Scientist** – 77 employees

- **Sales Representative** – 69 employees

- Does a highly experienced person responsible for leaving the company?

  Based on the **Attrition by Years at the Company** chart, highly experienced employees (those with many years at the company) are **less likely** to leave:

  - The chart shows the **highest attrition** occurs within the **first year** of employment, with **152 employees** leaving.
  - After about **5 years**, attrition significantly drops and stabilizes, with very few experienced employees leaving.

  This suggests that **highly experienced employees are not primarily responsible** for attrition. The company seems to have a higher turnover rate among newer employees, likely indicating that retention efforts should focus more on the early years of employment.

- How does the % salary hike play a crucial role in the increase in attrition of the employee?

  Employees receiving a **10-20% salary hike** show the highest attrition, suggesting dissatisfaction. Competitive salary increases are crucial for retention, as inadequate hikes may lead to employees seeking better opportunities.

CONCLUSION:

  The dashboard analysis reveals critical insights into employee attrition, highlighting factors such as educational background, job roles, age, and salary hikes. Addressing high attrition in specific groups, particularly Sales Executives and Developers, and ensuring competitive compensation can enhance retention efforts, ultimately leading to a more stable and satisfied workforce.