HR Data Analysis

DataSet Contains of 5 sheets:
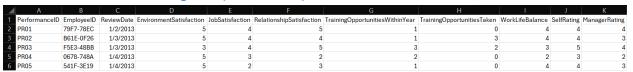1. Education Level
2. Rating Level
3. Performance Rating
4. Employee
5. Satisfiction Level

Snapshots about Data

- ### EducationaLevel.csv

A	B
EducationLevelID	EducationLevel
1	No Formal Qualifications
2	High School
3	Bachelors
4	Masters
5	Doctorate

- ### Performance Rating.csv (6710 Rows)

	A	B	C	D	E	F	G	H	I	J	K
1	PerformanceID	EmployeeID	ReviewDate	EnvironmentSatisfaction	JobSatisfaction	RelationshipSatisfaction	TrainingOpportunitiesWithinYear	TrainingOpportunitiesTaken	WorkLifeBalance	SelfRating	ManagerRating
2	PR01	79F7-78EC	1/2/2013	5	4	5	1	0	4	4	4
3	PR02	B61E-0F26	1/3/2013	5	4	4	1	3	4	4	3
4	PR03	F5E3-48BB	1/3/2013	3	4	5	3	2	3	5	4
5	PR04	0678-748A	1/4/2013	5	3	2	2	0	2	3	2
6	PR05	541F-3E19	1/4/2013	5	2	3	1	0	4	4	3

- ### RatingLevel.csv

	A	B	C
1	RatingID	RatingLevel	
2	1	Unacceptable	
3	2	Needs Improvement	
4	3	Meets Expectation	
5	4	Exceeds Expectation	
6	5	Above and Beyond	

- ### Employee.csv (1471 Rows)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	EmployeeID	FirstName	LastName	Gender	Age	BusinessTravel	Department	DistanceFromHome (KM)	State	Ethnicity	Education	EducationField	JobRole	MaritalStatus
2	3012-1A41	Leonelle	Simco	Female	30	Some Travel	Sales		27	IL	White	5	Marketing	Sales Executive	Divorced
3	CBCB-9C9D	Leonerd	Aland	Male	38	Some Travel	Sales		23	CA	White	4	Marketing	Sales Executive	Single
4	95D7-1CE9	Ahmed	Sykes	Male	43	Some Travel	Human Resources		29	CA	Asian or Asian American	4	Marketing	HR Business Partner	Married
5	47A0-559B	Ermentrude	Berrie	Non-Binary	39	Some Travel	Technology		12	IL	White	3	Computer Science	Engineering Manager	Married

	O	P	Q	R	S	T	U	V	W
1	Salary	StockOptionLevel	OverTime	HireDate	Attrition	YearsAtCompany	YearsInMostRecentRole	YearsSinceLastPromotion	YearsWithCurrManager
2	102059	1	No	1/3/2012	No	10	4	9	7
3	157718	0	Yes	1/4/2012	No	10	6	10	0
4	309964	1	No	1/4/2012	No	10	6	10	8
5	293132	0	No	1/5/2012	No	10	10	10	0
6	49606	0	No	1/5/2012	Yes	6	1	1	6

- ### Satisfied Level.csv

	A	B
1	SatisfactionID	SatisfactionLevel
2	1	Very Dissatisfied
3	2	Dissatisfied
4	3	Neutral
5	4	Satisfied
6	5	Very Satisfied

HR Data Analysis Objectives

The primary objective of this project is to develop an **HR Analytics Dashboard** in Power BI, providing **data-driven insights** to help HR teams make informed decisions regarding employee performance, satisfaction, attrition, and career growth. The dashboard will offer interactive visualizations and real-time analytics.

1. Employee Performance Analysis

- **What** are the key factors influencing employee performance?
- **How** do self-ratings compare to manager ratings?
- **Which** employees have consistently high or low performance ratings?
- **What** is the relationship between job satisfaction and performance?
- **How** do training opportunities impact employee performance?

2. Employee Satisfaction & Engagement

- **What** are the most common satisfaction levels among employees?
- **Which** departments or roles have the highest and lowest satisfaction scores?
- **How** does work-life balance affect job satisfaction?
- **What** are the main reasons employees report dissatisfaction?
- **How** does training influence employee engagement and satisfaction?

3. Attrition & Retention Insights

- **Who** are the employees most likely to leave the company?
- **What** trends exist in employee attrition over time?
- **Why** are employees leaving, and what factors contribute to turnover?
- **How** does job role, promotion history, and manager relationship affect retention?

4. Education & Career Development Analysis

- **How** does education level impact employee performance and career progression?
- **Which** departments have the highest and lowest levels of employee education?
- **What** is the relationship between education and job satisfaction?
- **How** do training and upskilling efforts impact employee growth?

5. Diversity & Inclusion Insights

- **What** is the gender distribution across different job roles?
- **How** does diversity affect employee satisfaction and performance?
- **Which** ethnic groups are underrepresented in leadership roles?
- **How** does career progression vary across different demographic groups?

6. HR KPI Dashboard & Decision Support

- **What** key HR metrics should be monitored regularly?
- **How** can we visualize performance, satisfaction, and attrition trends in Power BI?
- **What** filters and drill-down options should be included for better insights?
- **How** can HR teams use data to make informed decisions?

7. Compensation & Benefits Analysis

- **What** is the salary distribution across different roles and departments?
- **How** does compensation relate to performance and satisfaction?
- **Which** employees receive stock options or other benefits, and how does it impact retention?

8. Workforce Planning & Future Trends

- **What** are the predicted workforce trends for the coming years?
- **Which** departments are at risk of staffing shortages?
- **How** can HR prepare for future hiring and training needs?
- **What** strategies can help improve employee retention and development?