Understanding The Dataset

Team ID	PNT2022TMID18255
Project Name	Corporate Employee Attrition Analytics

This project is based on an understanding of the factors to keep employees at the Company and which prompt others to leave. The data can be downloaded from the Dataset: We need to use only (3 files - General_data.csv, Employee_Survey_Data.csv, Manager_Survey_data.csv) for the current project.

Let us try to understand each field of the data (general_data.csv)

Below are the values each column has. The column names are pretty self-explanatory.

- AGE Numerical Value
- 2. ATTRITION Employee leaving the company (0=no, 1=yes)
- 3. BUSINESS TRAVEL (1=No Travel, 2=Travel Frequently, 3=Travel Rarely)
- 4. DEPARTMENT (1=HR, 2=R&D, 3=Sales)
- 5. DISTANCE FROM HOME Numerical Value THE DISTANCE FROM WORK TO HOME
- 6. EDUCATION Numerical Value. (1 'Below College' 2 'College' 3 'Bachelor' 4 'Master' 5 'Doctor')
- 7. EDUCATION FIELD (1=HR, 2=LIFE SCIENCES, 3=MARKETING, 4=MEDICAL SCIENCES, 5=OTHERS, 6= TECHNICAL)
- 8. EMPLOYEE COUNT Numerical Value
- 9. EMPLOYEE ID Numerical Value
- 10. GENDER (1=FEMALE, 2=MALE)
- 11. JOB LEVEL Numerical Value
- 12. JOB ROLE (1=HR REP, 2=HR, 3=LAB TECHNICIAN, 4=MANAGER, 5= MANAGING DIRECTOR, 6= RESEARCH DIRECTOR, 7= RESEARCH SCIENTIST, 8=SALES EXECUTIVE, 9= SALES REPRESENTATIVE)
- 13. MARITAL STATUS (1=DIVORCED, 2=MARRIED, 3=SINGLE)
- 14. MONTHLY INCOME Numerical Value MONTHLY SALARY
- 15. NUMCOMPANIES WORKED Numerical Value NO. OF COMPANIES WORKED AT
- 16. OVER 18 (1=YES, 2=NO)
- 17. PERCENT SALARY HIKE Numerical Value PERCENTAGE INCREASE IN SALARY
- 18. STANDARD HOURS Numerical Value STANDARD HOURS
- 19. STOCK OPTIONS LEVEL Numerical Value STOCK OPTIONS (Higher the number, the more stock option an employee has)
- 20. TOTAL WORKING YEARS Numerical Value TOTAL YEARS WORKED
- 21. TRAINING TIMES LAST YEAR Numerical Value HOURS SPENT TRAINING
- 22. YEARS AT COMPANY Numerical Value TOTAL NUMBER OF YEARS AT THE COMPANY
- 23. YEARS SINCE LAST PROMOTION Numerical Value LAST PROMOTION
- 24. YEARS WITH CURRENT MANAGER Numerical Value YEARS SPENT WITH CURRENT MANAGER

Detail Co	Detail Compact Column						10 of 24 columns 🗸	
About this file This file contain general data about employees								
# Age	F	✓ Attrition =	▲ BusinessTravel =	▲ Department =	# DistanceFromHo =	# Education =	▲ EducationF	
18	60	true 0 0% false 0 0%	Travel_Rarely 71% Travel_Frequently 19% Other (450) 10%	Research & Develo 65% Sales 30% Other (189) 4%	1 29	1 5	Life Sciences Medical Other (1200)	
51		No	Travel_Rarely	Sales	6	2	Life Science	
31		Yes	Travel_Frequently	Research & Development	10	1	Life Science	
32		No	Travel_Frequently	Research & Development	17	4	Other	
38		No	Non-Travel	Research & Development	2	5	Life Science	
32		No	Travel_Rarely	Research & Development	10	1	Medical	
46		No	Travel_Rarely	Research & Development	8	3	Life Science	
28		Yes	Travel_Rarely	Research & Development	11	2	Medical	
20		No	Traval Daraly	Dacaarch &	10	2	life Science	

- b. Let us try to understand about each field of the data (employee_survey_data.csv)
 - 1. Employee ID
- 2. Environment Satisfaction (1 'Low' 2 'Medium' 3 'High' 4 'Very High')
 - 3. Job Satisfaction (1 'Low' 2 'Medium' 3 'High' 4 'Very High')
 - 4. Work Life Balance (1 'Bad', 2 'Good', 3 'Better', 4 'Best')

employee_survey_data.csv (51.96 kB) Detail Compact Column About this file This file contains Survey result ▲ WorkLifeBalance EmployeeID ▲ EnvironmentSatis... = ▲ JobSatisfaction Employee number/id Work Environment Job Involvement Level Work life balance level Satisfaction Level Job Involvement Level Job Involvement Level 31% 31% 3 60% 30% 3 30% 23% Other (1726) 39% Other (1720) 39% Other (731) 17% 4410 1 2 3 2 4 3 2 2 4 4 4 3 4 1 3 5 2 2 3 6 7 3

- c. Let us try to understand about each field of the data (manager_survey_data.csv)
 - 1. Employee ID

1

8

2. Job Involvement (1 'Low' 2 'Medium' 3 'High' 4 'Very High')

2

3

3. Performance Rating (1 'Low', 2 'Good', 3 'Excellent', 4 'Outstanding')

manager_survey_data.csv (43.04 kB)

Detail Compact Column

About this file

This file contains employees feedback survey about their managers

EmployeeID	= #	Joblnvolvement	F	# PerformanceRating =
		2.80 - 3.10 Count: 2,604		3.00 - 3.10 Count: 3,732
1	4410 1		4	3 4
1	3			3
2	2		9	4
3	3			3
4	2			3
5	3		3	3
6	3			3
7	3		8	4
8	3		3	4
9	3		1	4
10	3			3
4.4	2			^