**Employee Performance Data Analysis**

**(Discover patterns and insight into employee performance)**

1. **Brief Description**

Find out the Productivity and work quality. how employees are productive and what is their quality of work. Skills development and improvement. Achievement of goals and objective.

1. **Objectives/ Goal-** Achieving individual employee goals of employees along with organizational objectives. Also, enhance the skills and personal development of employees through the managers' help. Additionally, encourage work that helps in fulfilling business goals.
2. **Steps involve in Data Analysis-**
3. Collection of Dataset
4. Clean the data
5. Removing null values
6. Rename duplicate values
7. EDA on Gender, Age, State, Marital Status
8. Visualization
9. Max selling products
10. Conclusion
11. **Data Sources-** Kaggle.com
12. **Preprocessing steps**-
13. Import libraries
14. Fetch the data
15. Find out number of rows and column
16. Find out null values
17. If null values present than drop/ remove the null values
18. Check the duplicates
19. If duplicates present than rename it
20. Find out the type of data
21. If required change the data type if not correct
22. **Visualization-** Through Bar graph
23. **Proposed Methodology**- Used Statistical methodology to analyze the data
24. **Tools & Technology**- Used Statistical method in which used **mean** and **standard** deviation
25. **Outcomes/ Findings-**

* Exploring the relationship between the performance score, employee satisfaction and gender
* Performance scores are correlated with Employee satisfaction. However: Males have higher satisfaction (range from 3- 4.5) compare to Females (range from 1 - 4.2).
* In general, Female with lower performance score tend to have lower satisfaction while in Male, the lowest Performance score (1) is correlated with 3 on the scale of Satisfaction
* Number of male and female employees.
* In General, employees' satisfaction score is above average 3.9 within the range from 0-5
* Most employees have satisfaction range from 2.5 - 4.5.
* In some department like sale and production, male employees are lower satisfaction compare to female employees
* Female employees have higher performance compare to male employees.
* However, in the software engineering department, male employees have higher performance than female employees.
* There is a gap salary between single Male and Female employees.
* Employees with married status earn almost equally in general in Male and in Female (married) earn higher than single female employee.

1. **EDA-**

Perform Exploratory data analysis between different values / columns

1. **Conclusion**

Gender distribution is comparable between females and males and employee’s satisfaction frequently correlate with performance scores, with an average satisfaction score of approximately 3.9. (above average 2.5).