

Data Wrangling

Data Dynamos (Our Critical Discussion)

For HR Data Analysis



Data Wrangling

❖ Our Role in Data Wrangling:

- Our primary responsibility in the HR Analysis project was focused on Data Wrangling.
- Data Wrangling involves cleaning, organizing, and structuring raw data to make it usable for analysis and insights.
- We combined and prepared datasets.

❖ Why Data Wrangling is Critical:

- Data Wrangling is a fundamental process because raw data often comes in complex and unstructured formats.
- By cleaning and organizing the data, we ensure that the project has a solid foundation for accurate analysis.
- We ensured that relevant data is accessible in one dataset.

❖ Main and Supporting Datasets:

- The core of our work involved processing a main dataset with past HR Analysis.
- Supporting datasets included:
 - ☒ The dataset appears to have a wealth of HR-related columns. Key fields include:
 - **Demographics:** Gender, Age, Ethnicity, MaritalStatus
 - **Job Details:** Department, DistanceFromHome, BusinessTravel, HireDate
 - **Performance and Tenure:** PerformanceRating, YearsAtCompany, YearsInMostRecentRole, YearsSinceLastPromotion, YearsWithCurrManager
 - **Compensation:** Salary, StockOptionLevel
 - **Other:** OverTime, Attrition

❖ Merging Data for Better Insights:

- We used merge operations to integrate datasets.
- This process made it easier to analyze key factors affecting each element.

❖ Working with Nested Data:

- In case of nested data, we will use data explosion techniques to convert these lists into rows, making each element analyzable individually.
- This allowed us to compute metrics.

❖ Summary of Our Discussion & Contributions:

☒ Key Contributions:

- Cleaned and organized data from multiple HR datasets.
- Merged essential data points.
- Handled complex data structures to make the data ready for analysis.