

Business Requirements Document (BRD) for HR Data Analytics with Tableau Visualization

1. Introduction:

This Business Requirements Document (BRD) outlines the scope, objectives, and deliverables for conducting HR data analytics using Tableau visualizations based on the provided employee dataset. The goal is to gain insights into various HR-related metrics to support decision-making and improve organizational processes.

2. Scope:

The project focuses on analyzing HR data to extract meaningful insights related to employee performance, training, recruitment, and promotions. The analysis aims to identify patterns, trends, and correlations that can assist HR managers in making informed decisions.

3. Data Description:

The dataset contains the following attributes:

- `employee_id`: Unique identifier for each employee.
- `department`: Department in which the employee works.
- `region`: Region where the employee is employed.
- `education`: Education level of the employee.
- `gender`: Gender of the employee.
- `recruitment_channel`: Channel through which the employee was recruited.
- `no_of_trainings`: Number of additional trainings completed by the employee in the previous year.
- `age`: Age of the employee.
- `previous_year_rating`: Employee's rating for the previous year.
- `length_of_service`: Length of employee's service in years.
- `KPIs_met >80%`: Indicator (1 or 0) whether the employee met more than 80% of Key Performance Indicators (KPIs).
- `awards_won?`: Indicator (1 or 0) whether the employee won any awards in the previous year.
- `avg_training_score`: Average score in current training evaluations.
- `is_promoted`: Target variable indicating whether the employee is recommended for promotion (1 if yes, 0 if no).

4. Business Objectives:

- Identify factors affecting employee performance and promotions.
- Analyze the effectiveness of different recruitment channels.
- Explore the relationship between training and performance.
- Visualize demographic distribution within the organization.

5. Analysis Steps:

1. Data Cleaning and Preprocessing: Handle missing values, outliers, and ensure data quality.
2. Exploratory Data Analysis (EDA): Understand data distribution, correlations, and initial insights.
3. Performance Analysis: Explore the impact of KPIs, awards, and training on employee performance.
4. Recruitment Analysis: Evaluate the performance of employees recruited through different channels.
5. Demographic Analysis: Visualize employee demographics across departments, regions, education, and gender.
6. Promotion Analysis: Investigate factors contributing to employee promotions.

6. Tableau Visualizations:

1. Department Performance: Compare performance metrics across departments using bar charts and line graphs.
2. Recruitment Channel Analysis: Display the distribution of performance metrics for each recruitment channel.
3. Age and Experience: Visualize the relationship between age, length of service, and performance.
4. Training Impact: Analyze the correlation between training scores and KPI achievement.
5. Promotion Insights: Show the distribution of promotions based on various factors.
6. Interactive Dashboard: Integrate visualizations into an interactive Tableau dashboard.

7. Deliverables:

1. Cleaned and preprocessed dataset.
2. Tableau workbook containing interactive visualizations and dashboard.
3. Documentation outlining the analysis process, insights, and recommendations.

8. Timeline:

- Data Preparation: 1 week
- Exploratory Data Analysis: 2 weeks
- Tableau Visualization: 3 weeks
- Documentation and Finalization: 1 week

9. Stakeholders:

- HR Managers
- Recruitment Teams
- Department Heads

10. Budget:

The project requires access to Tableau software and potentially additional resources for data analysis and interpretation.

11. Risks and Challenges:

- Data quality issues may impact the accuracy of analysis.
- Interpretation of correlation as causation should be avoided.
- Limited data on certain factors may affect the comprehensiveness of insights.

12. Conclusion:

This BRD defines the requirements for conducting HR data analytics and creating Tableau visualizations to gain insights into employee performance, recruitment, and promotions. The project aims to provide valuable information to HR teams for strategic decision-making and process improvement.