

Tableau HR Scorecard - Measuring Success in Talent Management



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Table of Contents:

1. Introduction

- Brief project overview
- Objectives and goals
- Data source and context

2. Problem Definition & Design Thinking

- Problem statement
- Empathy map for key stakeholders
- Brainstorming and idea prioritization

3. Data Preparation

- Data source description

4. Worksheets Section

- Contexts
- Visualizations and key findings

5. Dashboard Creation

- Overview of the dashboard
- Explanation of dashboard components
- How the dashboard addresses the problem statement
- Visual of the complete dashboard

6. Storytelling

- Creation of a compelling story using the worksheets and dashboard
- Key insights conveyed through the story

7. Data Analysis and Insights

- Interpretation of findings

8. Conclusion

- Recap of project objectives and achievements
- The significance of the project in the context of talent management

9. Appendix

- Project files links

1. Introduction

Project Overview:

The Tableau HR Scorecard project is designed to measure and evaluate the success of talent management strategies within an organization. The project aims to provide HR professionals and business leaders with a comprehensive framework for tracking and analyzing key performance indicators (KPIs) related to workforce planning, recruitment, retention, and development.

Objectives and Goals:

The primary objectives of this project are as follows:

- ❖ To create a data-driven HR Scorecard using Tableau software.
- ❖ To visualize and analyze key HR metrics related to attrition, workforce demographics, and employee satisfaction and many more.
- ❖ To provide actionable insights that can guide talent management strategies and decision-making.

Data Source and Context:

The dataset used for this project was provided by our mentors and contains detailed information about the organization's employees, including demographics, departmental information, attrition data, and job satisfaction scores. The project context revolves around understanding and addressing attrition challenges within the organization while utilizing Tableau's data visualization capabilities to gain valuable insights.

2. Problem Definition & Design Thinking

Problem Statement:

The central problem addressed in this project is the need to assess and improve talent management strategies within the organization. The HR Scorecard is aimed at tackling this challenge by creating a comprehensive framework for evaluating key HR metrics. The project seeks to measure and analyze attrition, workforce demographics, and employee satisfaction, with the ultimate goal of identifying areas for improvement in talent management.

Empathy Map:

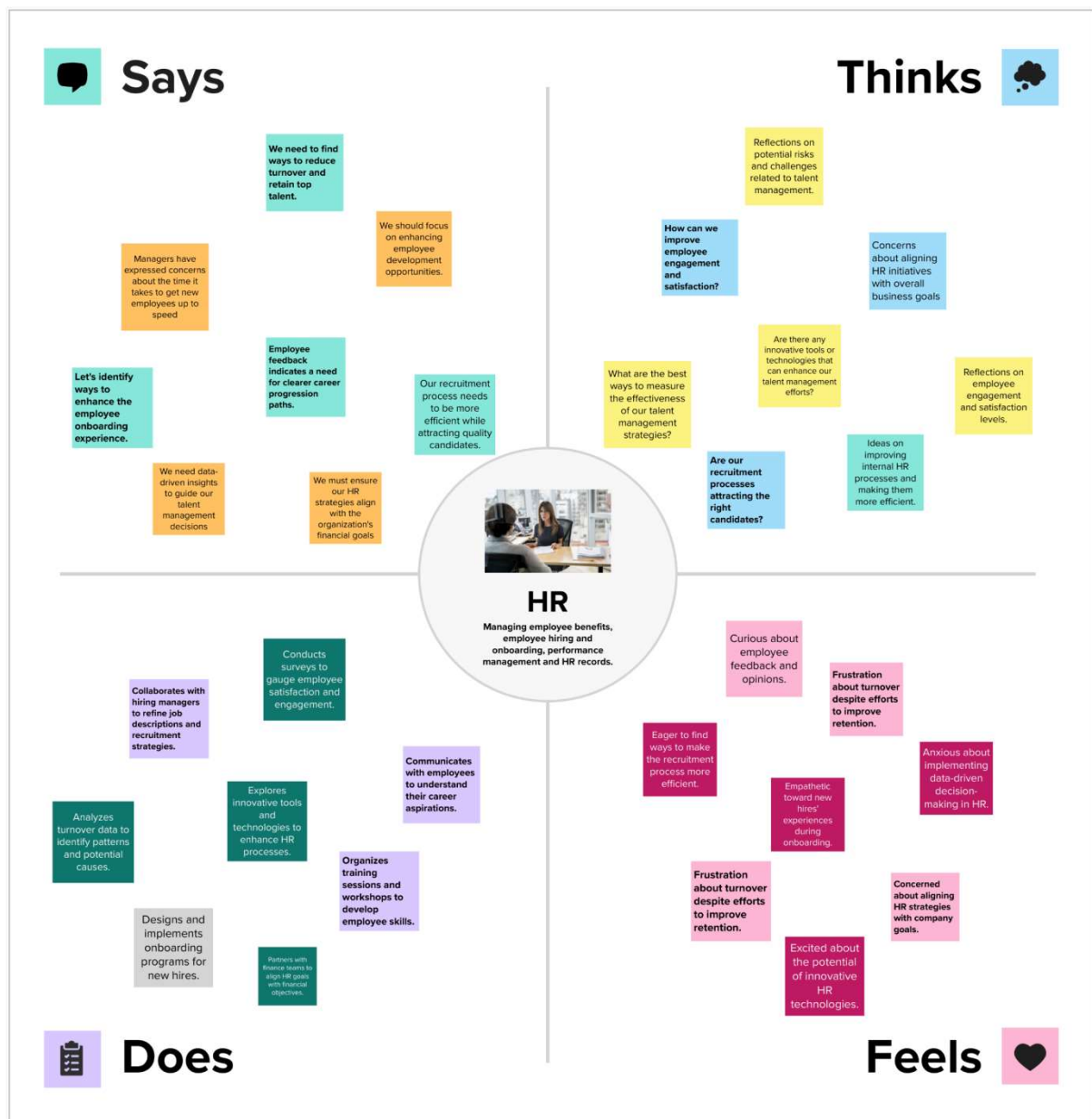
To better understand the needs, feelings, and perspectives of key stakeholders involved in talent management, an empathy map was created. This map offers insights into the following:

Thinks: Key considerations and thoughts of HR professionals and other stakeholders involved in talent management.

Says: Expressions and statements related to the challenges and goals of talent management.

Does: Actions taken by stakeholders in response to talent management challenges.

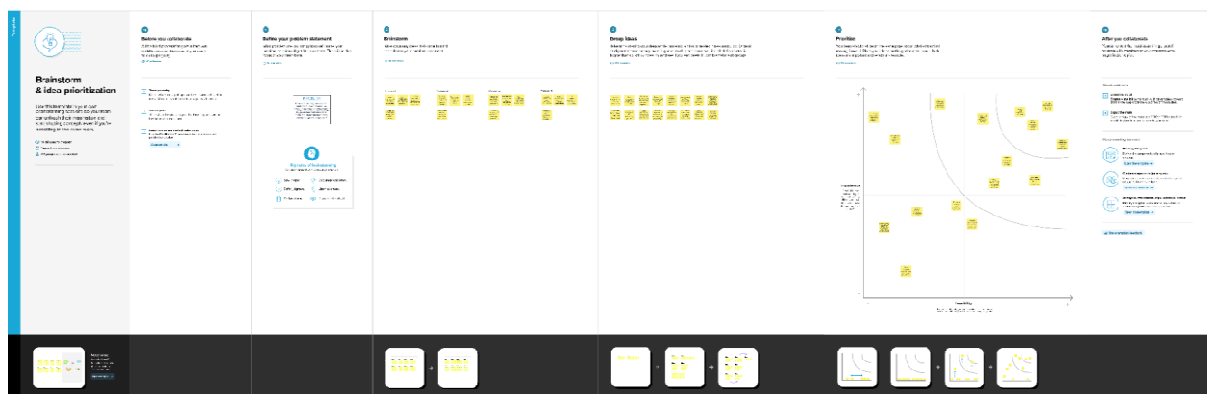
Feels: Emotional states and motivations that drive decision-making.



The empathy map revealed that stakeholders in the organization, including HR professionals, managers, and employees, have a vested interest in addressing attrition, optimizing workforce demographics, and enhancing job satisfaction. Their thoughts, statements, actions, and emotions provided valuable input for designing the HR Scorecard project.

Brainstorming and Idea Prioritization:

To address the challenges identified in the problem statement and empathy map, a brainstorming session was conducted. The session aimed to generate a range of ideas for creating the HR Scorecard, including the selection of relevant key performance indicators (KPIs) for measurement.



The generated ideas encompassed visualizations and analyses related to attrition rates, employee demographics, departmental insights, and job satisfaction scores. To prioritize these ideas, a system was established to evaluate their feasibility, potential impact, and alignment with the project's objectives. The prioritization process led to the selection of key KPIs and metrics that would be featured in the HR Scorecard.

3. Data Preparation

Data Source:

The dataset used for this project was provided in CSV (Comma-Separated Values) format. It contains a rich source of information about the organization's employees, including demographic details, departmental information, attrition data, and job satisfaction scores. The dataset includes the following key fields:

- Employee ID
- Gender
- Age
- Department
- Education Field
- Job Role
- Attrition
- Job Satisfaction Score
- And other relevant attributes

Data Cleaning and Transformation:

To make the dataset compatible with Tableau and suitable for our analysis, a series of data cleaning and transformation steps were undertaken:

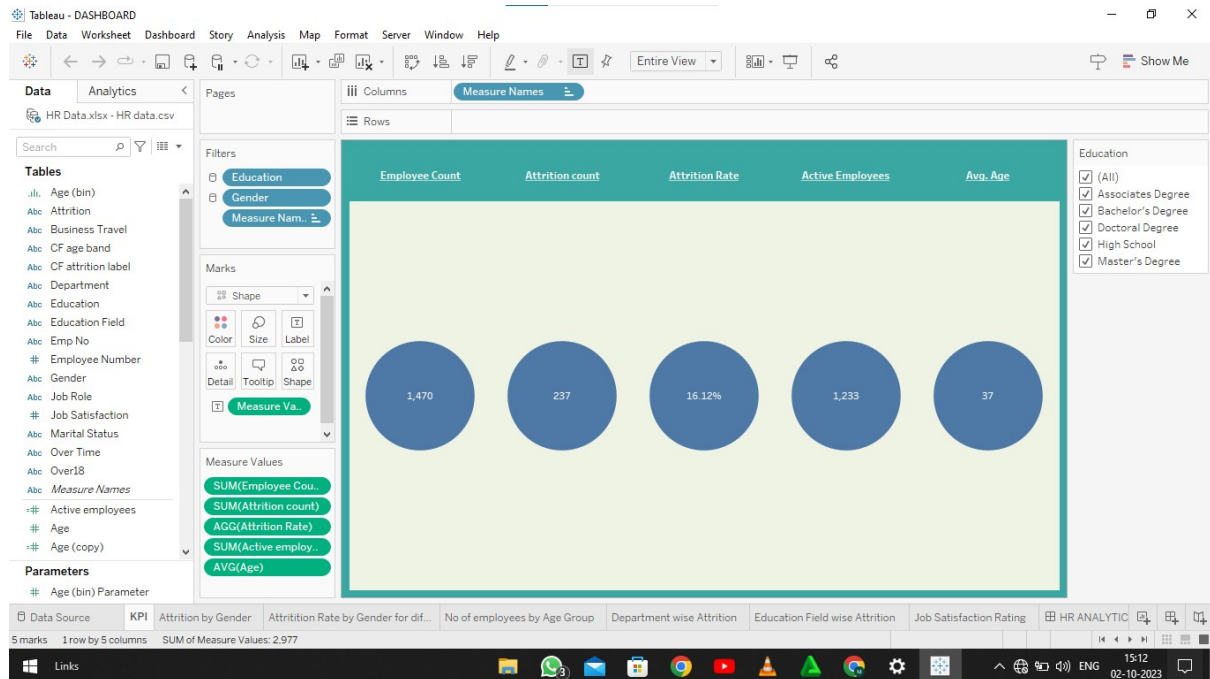
1. **Data Import:** The CSV file was imported into Tableau, establishing a connection between the software and the dataset.
2. **Data Profiling:** An initial data profiling was performed to understand the dataset's structure and identify any inconsistencies, missing values, or outliers.
3. **Data Cleaning:** In this step, data quality issues were addressed. Missing values were handled through imputation or removal, and outliers were examined and, if necessary, corrected.
4. **Data Transformation:** Several calculated fields were created to generate insights for the worksheets. For example, attrition rate calculations, age group categorization, and employee counts in various dimensions were created to facilitate analysis.
5. **Data Aggregation:** The dataset was aggregated to create new summary tables and views that were more suitable for visualization in Tableau.
6. **Data Formatting:** Formatting and naming conventions were applied to ensure consistency and clarity in field names, labels, and data types.

4. Worksheets Section

Worksheet 1: Attrition Overview

This worksheet provides an overview of attrition within the organization, detailing the total employee count, the number of active employees, and the attrition rate. It also showcases the average employee count.

Visualizations and Key Findings:



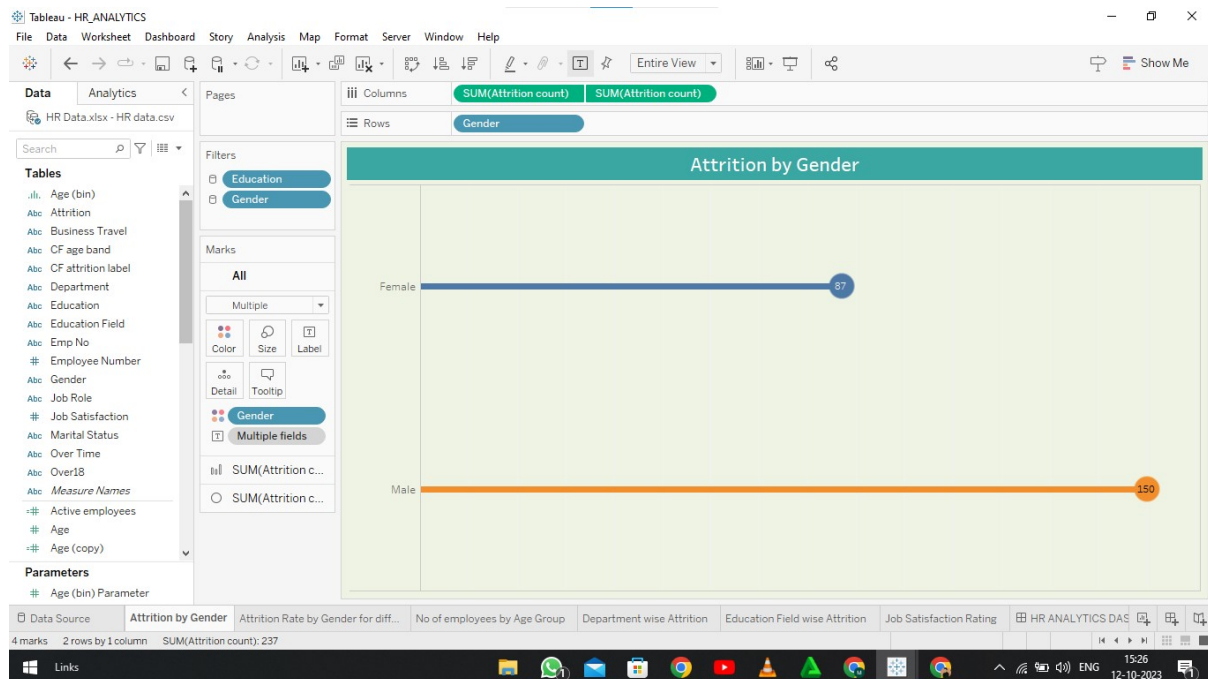
Key Findings:

- The total employee count stands at 1,470, with 1,233 currently active employees.
- The attrition rate is calculated at 16.12%.
- The average number of employees is 37.

Worksheet 2: Gender-Based Attrition

This worksheet focuses on gender-based attrition within the organization, comparing the attrition counts for male and female employees.

Visualizations and Key Findings:



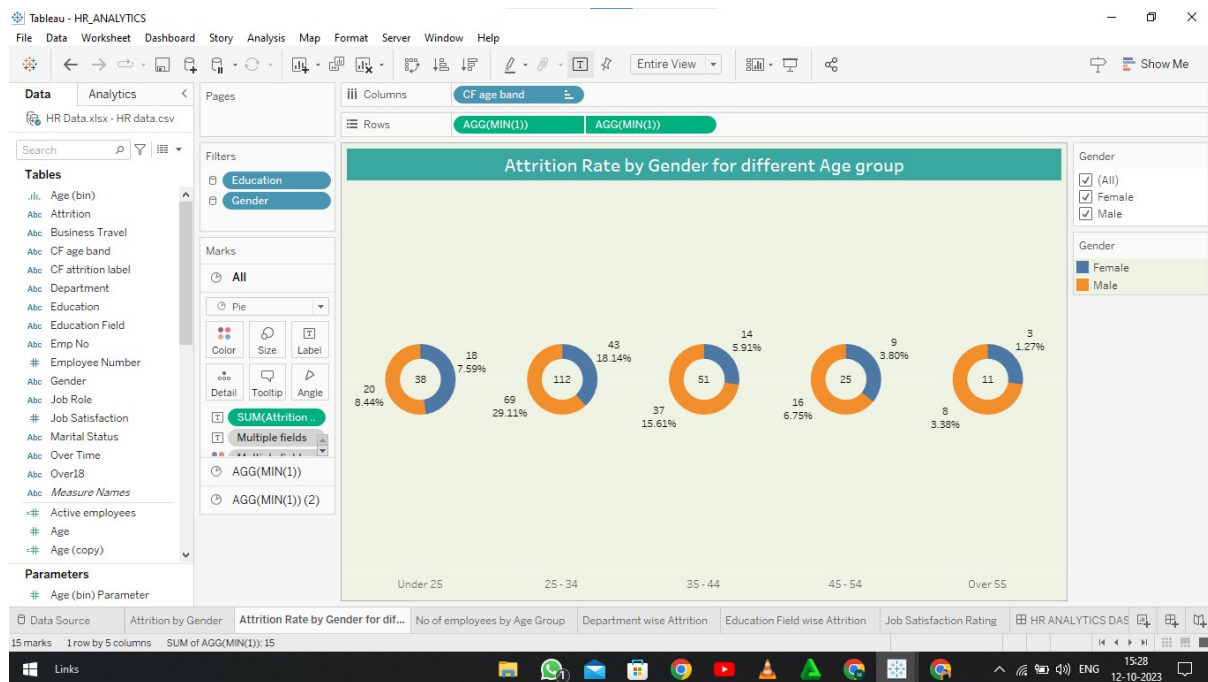
Key Findings:

- The highest proportion of attrition is attributed to male employees (150).
- Female employees have a notably lower attrition count (87).

Worksheet 3: Age-Related Attrition

This worksheet analyzes the impact of age on attrition, with a focus on different age groups.

- **Visualizations and Key Findings:**



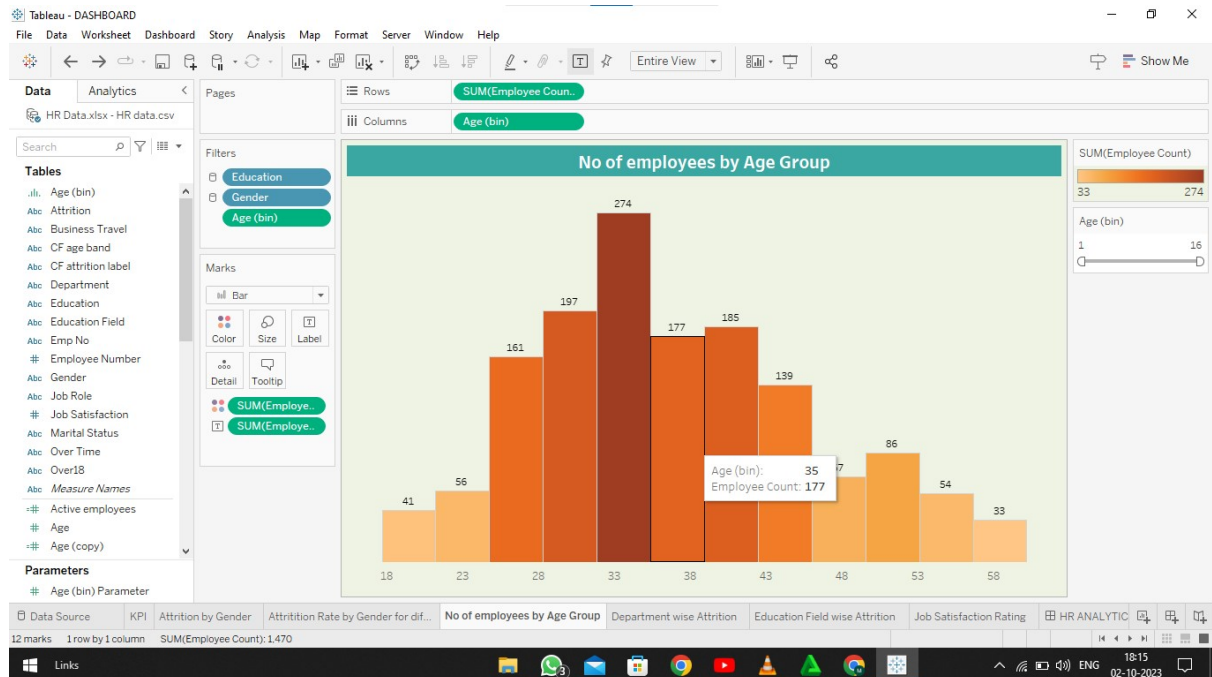
Key Findings:

- The highest rate of attrition is observed among employees aged 25-34.
- The lowest attrition rate is found among the age group over 55.

Worksheet 4: Employee Age Distribution

This worksheet provides an overview of the distribution of employees across various age groups.

Visualizations and Key Findings:



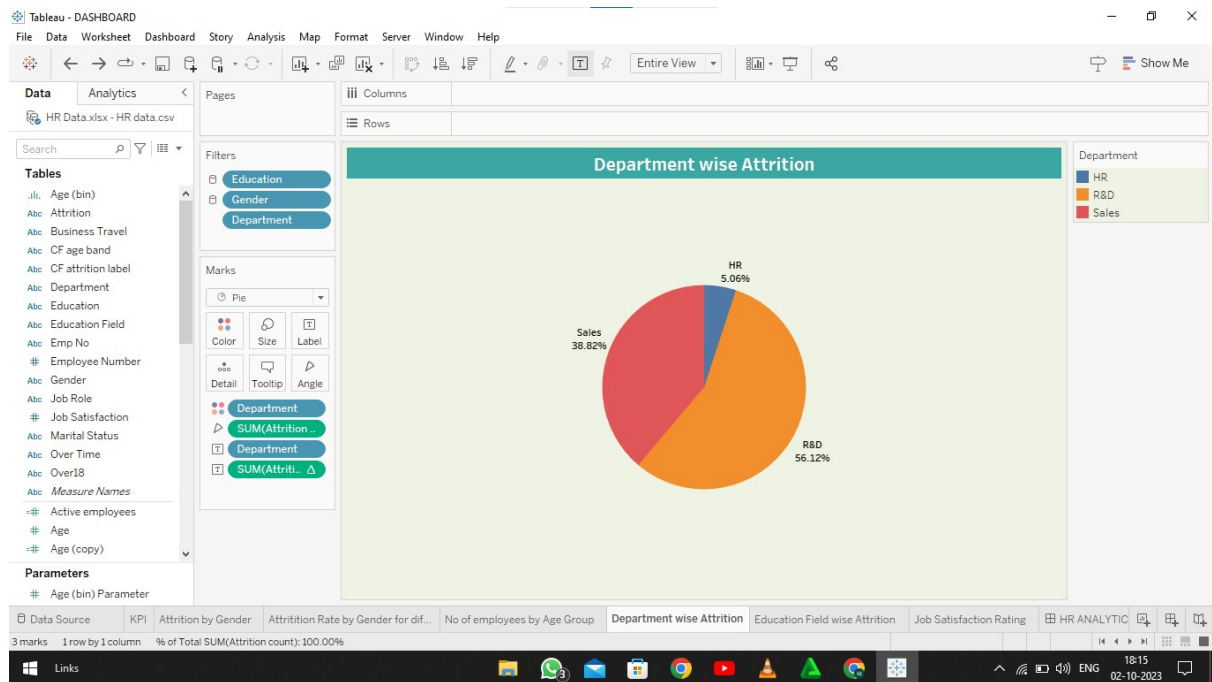
Key Findings:

- The age group with the highest employee count is 33.
- The age group with the lowest employee count is 57.

Worksheet 5: Departmental Attrition

This worksheet focuses on attrition within different departments, providing insights into which departments experience the highest attrition.

Visualizations and Key Findings:



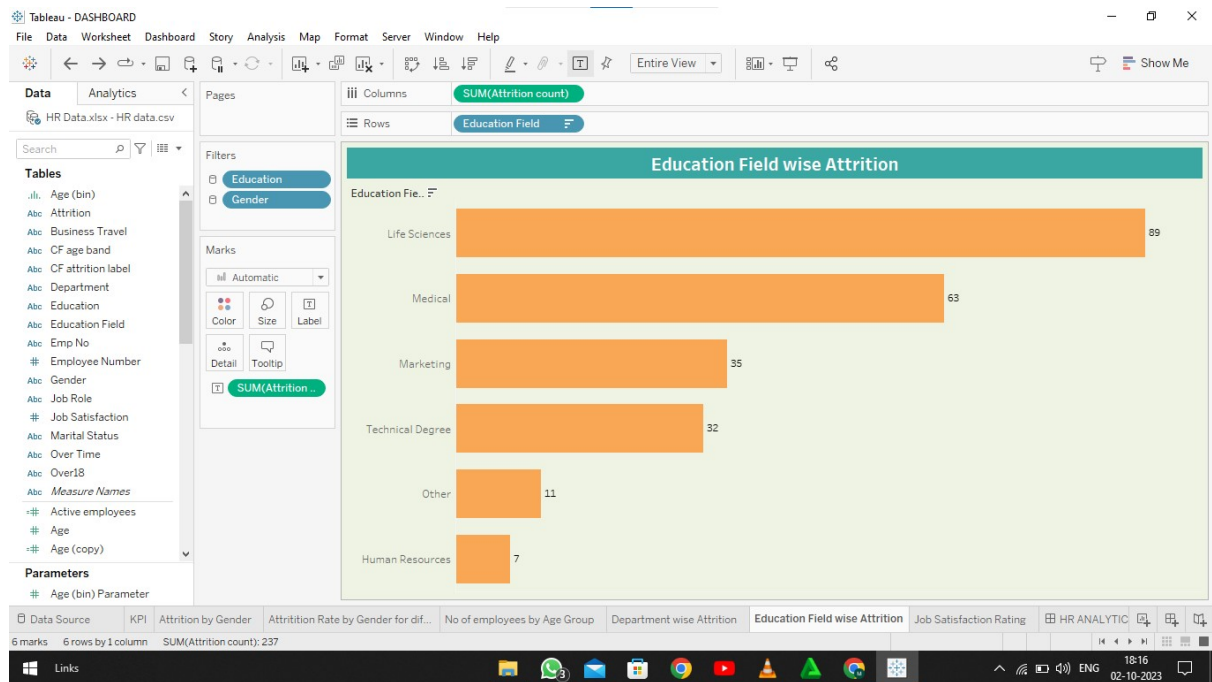
Key Findings:

- More than half of the attritions originate from the R&D department, accounting for 56.12% of the total.

Worksheet 6: Attrition by Education Field

This worksheet analyzes attrition by education field, highlighting which fields experience the highest attrition.

Visualizations and Key Findings:



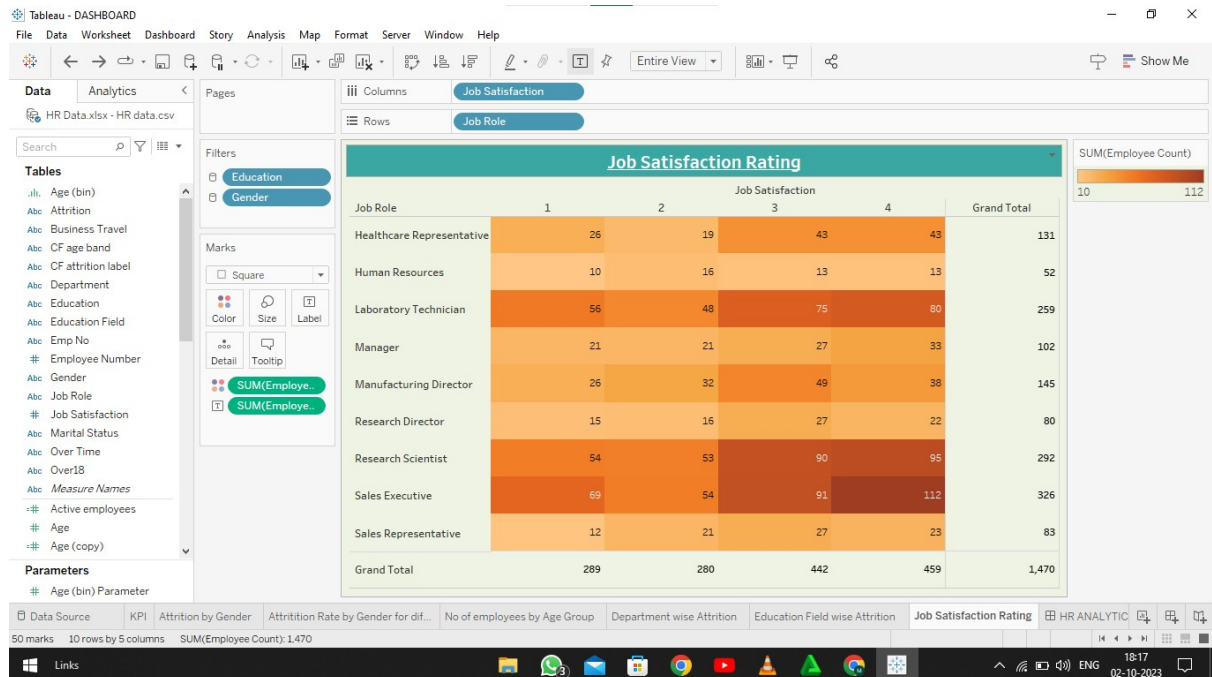
Key Findings:

- The highest attrition count is associated with employees from the Life Sciences background (89).
- The lowest attrition rate is seen among those in the HR department (7 departures).

Worksheet 7: Job Satisfaction Analysis

This worksheet delves into job satisfaction levels among employees, showcasing the distribution of satisfaction scores.

Visualizations and Key Findings:



Key Findings:

- The majority of employees have expressed a high level of job satisfaction, with the highest number of employees rating their satisfaction as 4 out of 4.
- Employees from the Sales Executives category have the highest representation in this group (112 individuals).

5. Dashboard Creation

Overview of the Dashboard:

The dashboard created for the Tableau HR Scorecard project serves as a central hub for visualizing key HR metrics related to attrition, workforce demographics, and employee satisfaction. It combines the insights from the seven individual worksheets, offering a holistic view of talent management within the organization.

Explanation of Dashboard Components:

The dashboard is composed of several key components, each designed to address specific aspects of the problem statement and provide actionable insights:

Attrition Overview: This section provides a quick snapshot of attrition rates, employee counts, and averages.

Gender-Based Attrition: Users can explore gender-specific attrition counts and comparisons.

Age-Related Attrition: Age groups and attrition rates are visualized to highlight trends.

Departmental Attrition: The department-wise attrition overview is displayed, helping identify areas with high attrition.

Education Field Analysis: Attrition is analyzed based on education fields, showcasing trends across different backgrounds.

Job Satisfaction Analysis: The distribution of job satisfaction scores is presented for understanding employee sentiments.

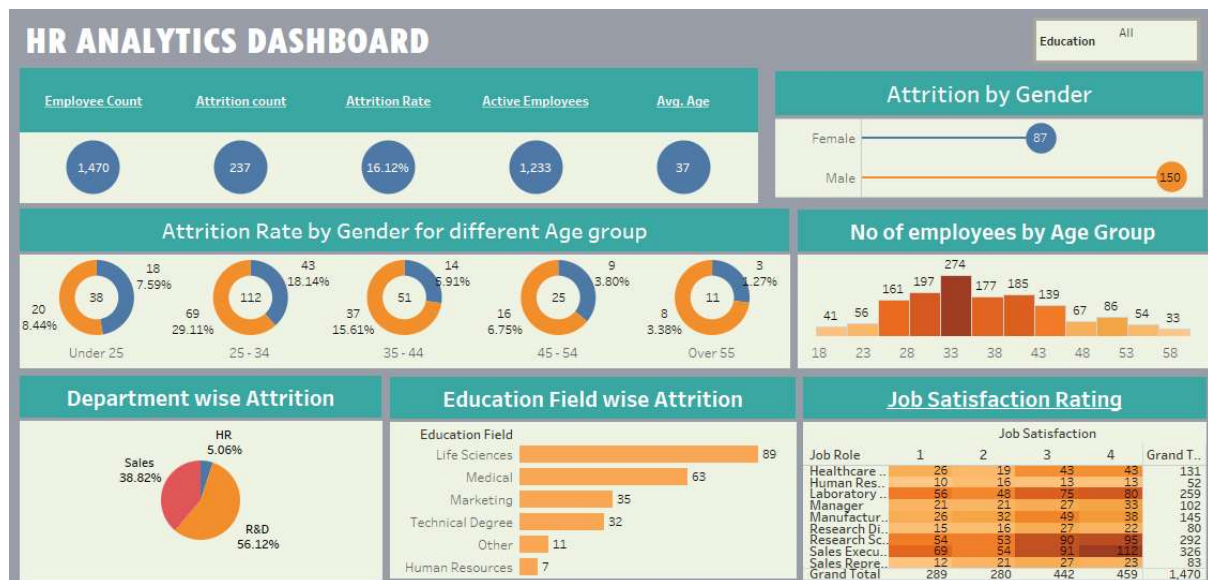
Employee Age Distribution: The age distribution of employees is shown to understand the workforce composition.

How the Dashboard Addresses the Problem Statement:

The dashboard effectively addresses the problem statement by providing a comprehensive view of talent management and attrition. It allows stakeholders, including HR professionals and business leaders, to:

- ❖ Identify attrition rates and trends.
- ❖ Understand the demographics of the workforce.
- ❖ Gauge employee satisfaction.
- ❖ Pinpoint departments or education fields with high attrition.
- ❖ Formulate data-driven strategies for talent management.

Visual of the Complete Dashboard:



The dashboard combines interactive visualizations and user-friendly components, enabling users to explore and extract insights related to talent management. It plays a pivotal role in the project's objective of measuring and enhancing talent management strategies within the organization.

6. Storytelling

Creation of a Compelling Story:

In the Tableau HR Scorecard project, storytelling plays a vital role in communicating the insights derived from the worksheets and dashboard. The story is a narrative that guides viewers through the data, providing context, highlighting key findings, and offering actionable takeaways.

Key Insights Conveyed Through the Story:

The story conveys several key insights, offering a structured and narrative-driven understanding of the HR metrics and talent management strategies. These insights include:

1. Attrition Overview:

- ❖ The project begins by setting the stage with an understanding of the overall attrition rate and employee counts.
- ❖ It highlights the significance of measuring attrition as a key performance indicator in talent management.

2. Gender-Based Attrition:

- ❖ The story delves into the gender-specific aspects of attrition, emphasizing the difference in attrition counts between male and female employees.
- ❖ It suggests the importance of gender-aware talent management strategies.

3. Age-Related Attrition:

- ❖ The narrative examines the impact of age on attrition, underlining the attrition trends across different age groups.
- ❖ It indicates that talent management strategies should be tailored to age-specific needs.

4. Departmental Attrition:

- ❖ The story highlights the prevalence of attrition in various departments, specifically drawing attention to those with higher attrition rates.
- ❖ It emphasizes the need to address attrition within specific departments.

5. Education Field Analysis:

- ❖ The story explores the relationship between education fields and attrition, noting variations in attrition rates.
- ❖ It suggests that aligning talent management with educational backgrounds could be advantageous.

6. Job Satisfaction Analysis:

- ❖ The story provides insights into the distribution of job satisfaction scores, indicating the levels of employee contentment.
- ❖ It implies that job satisfaction is a significant factor in attrition management.

7. ****Employee Age Distribution:****

- ❖ The narrative addresses the employee age distribution, showcasing the concentration of employees in different age groups.
- ❖ It raises questions about tailoring HR strategies based on the age composition of the workforce.

The storytelling aspect of this project not only presents data but weaves it into a narrative that guides viewers to discover and comprehend the challenges and opportunities within talent management. It makes data-driven insights more accessible and actionable for HR professionals and business leaders.

7. Data Analysis and Insights

Summary of Insights Gained from the Data:

The analysis of HR metrics and talent management data has yielded several key insights that are valuable for addressing the organization's talent management strategies:

1. Attrition Rates and Demographics:

- Attrition rates are at 16.12%, indicating a need for attrition management.
- There is a balanced gender distribution among employees, with a slightly higher attrition rate among males.
- The age group 25-34 experiences the highest attrition, while those over 55 have the lowest attrition rate.
- The majority of employees are in the 33 age group.

2. Departmental Trends:

- The R&D department has the highest attrition rate at 56.12%, signaling a need for talent retention strategies.
- Attrition in other departments is relatively lower, suggesting that department-specific strategies may be beneficial.

3. Education Field Impact:

- Employees from the Life Sciences background face the highest attrition, indicating a need for tailored HR approaches.
- The HR department experiences the lowest attrition, demonstrating the effectiveness of HR-specific strategies.

4. Job Satisfaction:

- The majority of employees express high job satisfaction, particularly among Sales Executives.
- High job satisfaction is positively associated with lower attrition rates.

Interpretation of Findings:

These insights provide an understanding of the organization's talent management landscape. The interpretation of these findings indicates the following:

Talent Management Focus: The organization should prioritize talent management strategies that specifically address departments like R&D and demographics within the age group 25-34.

Gender Awareness: Tailoring talent management based on gender differences is advisable to address the slight gender-based attrition disparities.

Education Field Consideration: Tailoring HR initiatives based on educational backgrounds can enhance retention rates.

Job Satisfaction Impact: Strategies that maintain or improve high job satisfaction are likely to reduce attrition rates and foster employee retention.

Relevance to the HR Scorecard Framework:

The insights derived from this data analysis are highly relevant to the HR Scorecard framework. They align with the framework's objectives to measure and evaluate the success of talent management strategies. By addressing the challenges and opportunities highlighted in the insights, the organization can develop a more effective HR Scorecard to drive talent management improvements and achieve its goals. This data-driven approach enhances the organization's capacity to measure and manage talent effectively.

8. Conclusion

Recap of Project Objectives and Achievements:

In this Tableau HR Scorecard project, the primary objectives were to measure and enhance talent management strategies within the organization. The project set out to create a comprehensive framework for evaluating key HR metrics related to workforce planning, recruitment, retention, and development. It aimed to provide actionable insights to HR professionals and business leaders.

The achievements of the project include:

- Successful creation of a Tableau HR Scorecard comprising seven worksheets, addressing attrition, demographics, and job satisfaction.
- Development of a user-friendly dashboard to combine these insights for easy access and exploration.
- Creation of a compelling narrative through storytelling to guide viewers in understanding key HR metrics.
- Derivation of valuable insights regarding attrition trends, demographics, and job satisfaction.
- Alignment with the project's objectives to measure and enhance talent management strategies.

The Significance of the Project in the Context of Talent Management.

The project holds significant importance in the context of talent management within the organization. It serves as a valuable tool for HR professionals and business leaders by providing the following benefits:

Data-Driven Decision-Making: The project empowers decision-makers with data-driven insights, enabling them to make informed choices in talent management.

Enhanced Attrition Management: The project highlights areas with high attrition rates, allowing for the development of targeted strategies to reduce attrition and retain talent.

Demographic Insights: By analyzing demographics, the project aids in tailoring HR strategies to specific employee groups, ensuring their unique needs are met.

Job Satisfaction Enhancement: The distribution of job satisfaction scores helps identify areas where job satisfaction can be improved, leading to higher employee retention.

Measurement and Evaluation: The Tableau HR Scorecard serves as a framework for ongoing measurement and evaluation of talent management strategies, allowing for continuous improvement.

In conclusion, this project is of paramount significance in elevating talent management strategies within the organization. It offers a structured approach to measuring HR metrics and making data-driven decisions that can enhance the workforce's overall satisfaction and retention. Through the insights gained, the organization can embark on a journey of continuous improvement in talent management.

9. Appendix

DASHBOARD :

https://public.tableau.com/views/HR_ANALYTICS_DASHBOARD_16972037475800/HRANALYTICSDASHBOARD?:language=en-US&:display_count=n&:origin=viz_share_link

STORY :

https://public.tableau.com/views/HR_ANALYTICS_STORYLINE/HRanalyticsStoryline?:language=en-US&:display_count=n&:origin=viz_share_link

DEMONSTRATION VIDEO : <https://youtu.be/qBB0UZ8WNkg?si=--bVUDQf3UogQh0V>

GITHUB : https://github.com/mj2668/HR_Scorecard_NM2023TMID24071