HR ANALYTICS REPORT DATA LITERACY WITH TABLEAU

TEAM ID

NM2023TMID13658

MEMBERS

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PROJECT TITTLE

HR ANALYTICS WITH TABLEAU

PAPER TITTLE

DATA LITERACY WITH TABLEAU

DETAILS

III YEAR ,

B.SC., MATHEMATICS,

PG & RESEARCH DEPARTMENT OF MATHEMATICS,

KALAIGNAR KARUNANIDHI GOVERNMENT ARTS COLLEGE,

TIRUVANNAMALAI.

UNIVERSITY AFFLIATED

THIRUVALLUVAR UNIVERSITY, VELLORE

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INTRODUCTION

1.1 Overview

A brief description about our project

An HR analytics project using Tableau involves leveraging Tableau's data visualization and analytics capabilities to gain insights from HR data. Here's a brief description of the steps involved:

1. *Data Gathering:* Collect HR data from various sources, such as HRIS systems, spreadsheets, or surveys. This data can include information about employees and more.

2. *Data Preparation:* Cleanse and preprocess the data to ensure it's in a suitable format for analysis.

3. *Connecting to Tableau:* Import the cleaned data into Tableau.

4. *Data Exploration:* Use Tableau's drag-and-drop interface to explore the HR data. Create various visualizations to identify trends, patterns, and outliers.

5. *Dashboard Creation:* Build interactive dashboards in Tableau to present key HR metrics and insights. Dashboards can include multiple visualizations like bar charts, line graphs, and tables.

6. *Filtering and Interactivity:* Make the dashboards interactive by adding filters and parameters.

7. *Data Storytelling:* Use Tableau to tell a compelling data story. Explain the significance of our findings and provide actionable insights based on the visualizations.

8. *Sharing and Collaboration:* Share our Tableau dashboards with relevant stakeholders within the HR department and the organization as a whole. Tableau offers options for sharing via Tableau Server or Tableau Online.

9. *Continuous Monitoring:* Continuously update and monitor your HR analytics project as new data becomes available. Ensure that your dashboards stay relevant and provide up-to-date insights.

10. *Feedback and Iteration:* Gather feedback from users and stakeholders to improve the Tableau dashboards and refine the analysis as needed.

Different visualizations

1. KPI
2. Department wise Attrition
3. No. of employees by Age Group
4. Job Satisfaction Rating
5. Education Field wise Attrition

1.2 Purpose

Using Tableau for HR analytics, we can achieve several significant outcomes and benefits, including:

1. *Data-Driven Decision-Making:* Tableau enables HR profession to base their decisions on data and visual insights rather than intuition. This leads to more informed and effective HR strategies.

2. *Improved Recruitment:* we can analyze recruitment data to identify the most successful sourcing channels, optimize job postings, and reduce time-to-fill positions, resulting in more efficient hiring processes.

3. *Reduced Turnover:* By identifying turnover trends and potential causes through Tableau visualizations.

4. *Enhanced Employee Engagement:* Visualizing employee survey data in Tableau helps HR understand engagement levels.

5. *Workforce Planning:* Tableau assists in forecasting workforce needs, ensuring that your organization has the right talent in place to meet future demands.

6. *Talent Development:* You can analyze performance metrics and training data to identify highpotential employees.

7. *Cost Optimization:* Tableau helps HR identify areas where cost savings can be achieved.

8. *Customized Reporting:* Create customized reports and dashboards that cater to the specific needs of HR stakeholders.

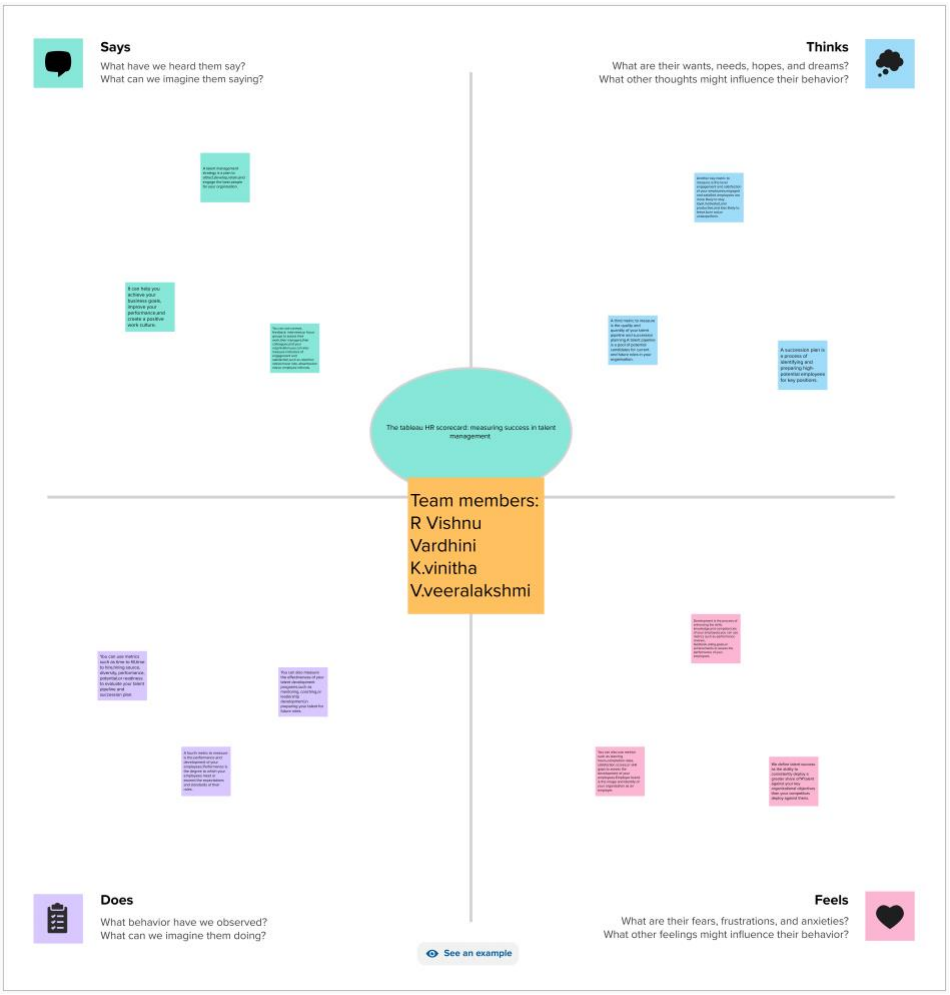
9. *Communication and Transparency:* Share Tableau dashboards with leadership and employees to

promote transparency and open communication about HRrelated matters.

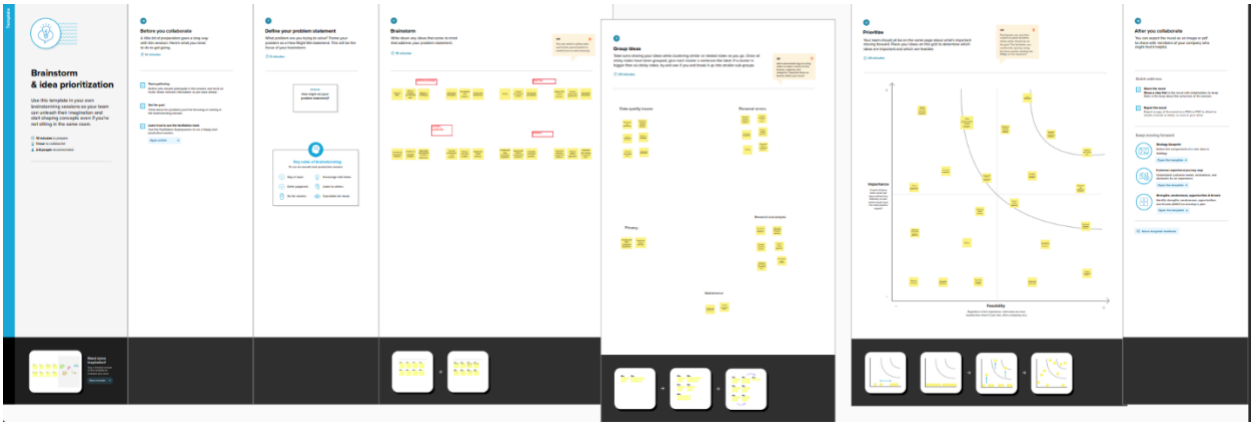
10. *Continuous Improvement:* Regularly update and refine your Tableau HR analytics project to reflect changing HR dynamics and business needs.

2 Problem Definition & Design Thinking

2.1 Empathy Map screenshot



2.2 Brainstorming Map screenshot



Employee Count | Attrition Count | Attrition Rate | Active Employees | Avg. Age

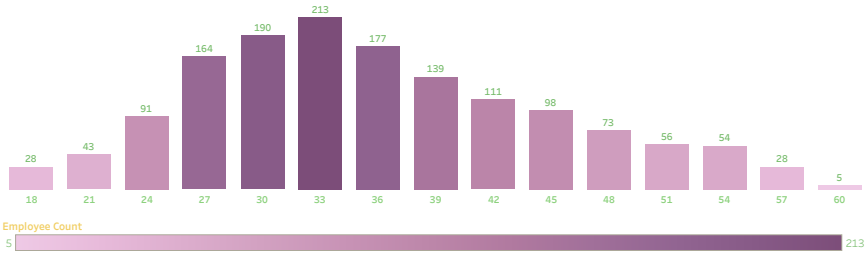
Attrition by Gender

Job Satisfaction Rating

Job Role	Job Satisfaction 1	2	3	4	Grand Total
Healthcare Representative	26	19	43	43	131
Human Resources	10	16	13	13	52
Laboratory Technician	56	48	75	80	259
Manager	21	21	27	33	102
Manufacturing Director	26	32	49	38	145
Research Director	15	16	27	22	80
Research Scientist	54	53	90	95	292
Sales Executive	69	54	91	112	326
Sales Representative	12	21	27	23	83
Grand Total	289	280	442	459	1,470

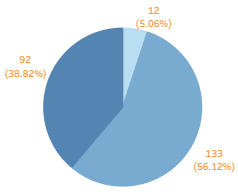
All

No of Employee by Age Group



Employee Count

Department wise Attrition



Department

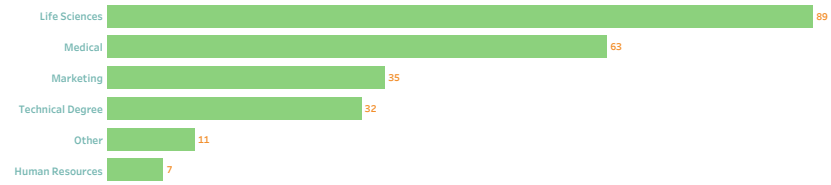
HR

R&D

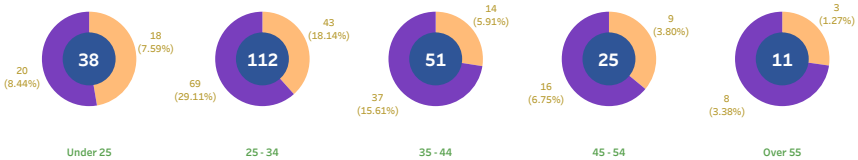
Sales

Bin Size

Education Field wise Attrition



Attrition Rate by Gender for Different Age Group



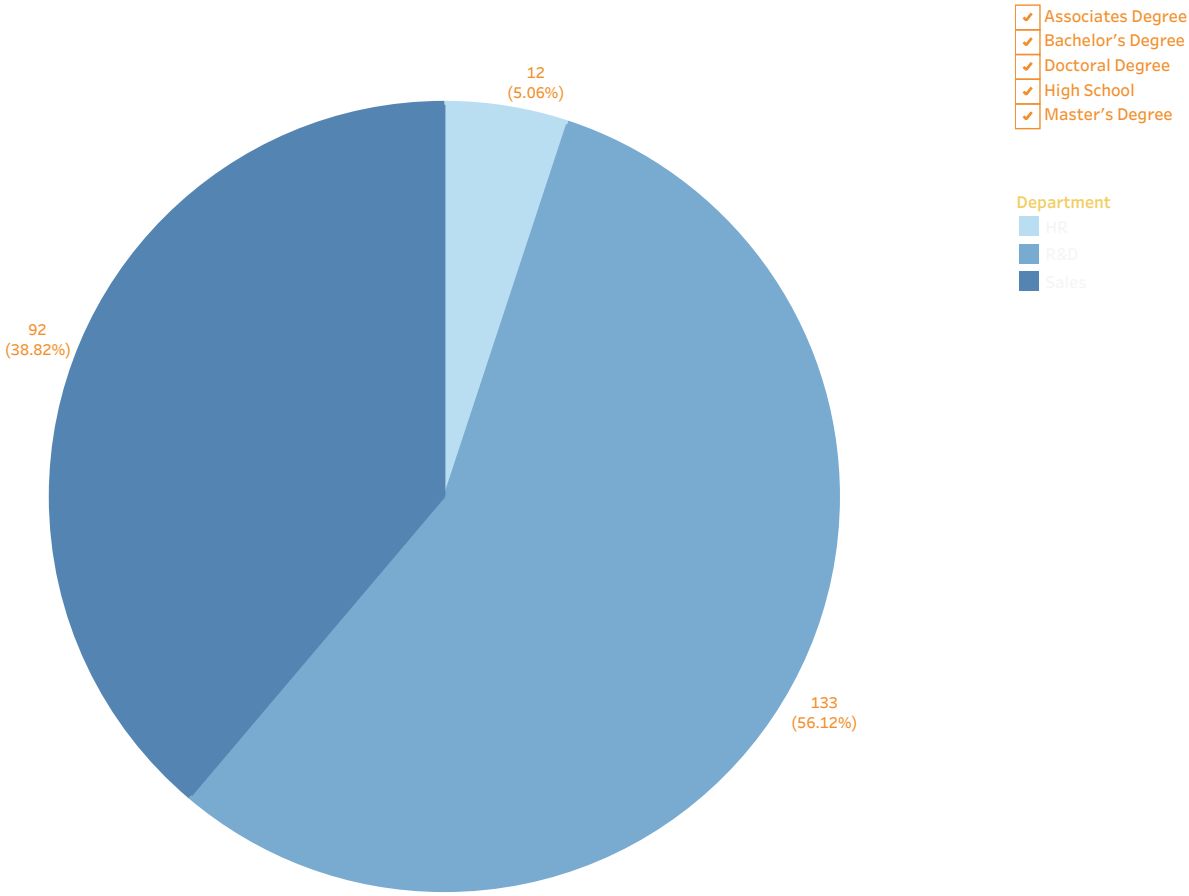
Gender

Female

Male

HR ANALYTICS STORYLINE

R&D department has the highest no.of attrition rate i.e.56.12% as compared to other departments.	The highest no.of employees i.e.213 are employed at the age of 33	Employees are expected to be satisfied in Sales Executive Job role.	Most of the attrition occurs in the field of Life Sciences



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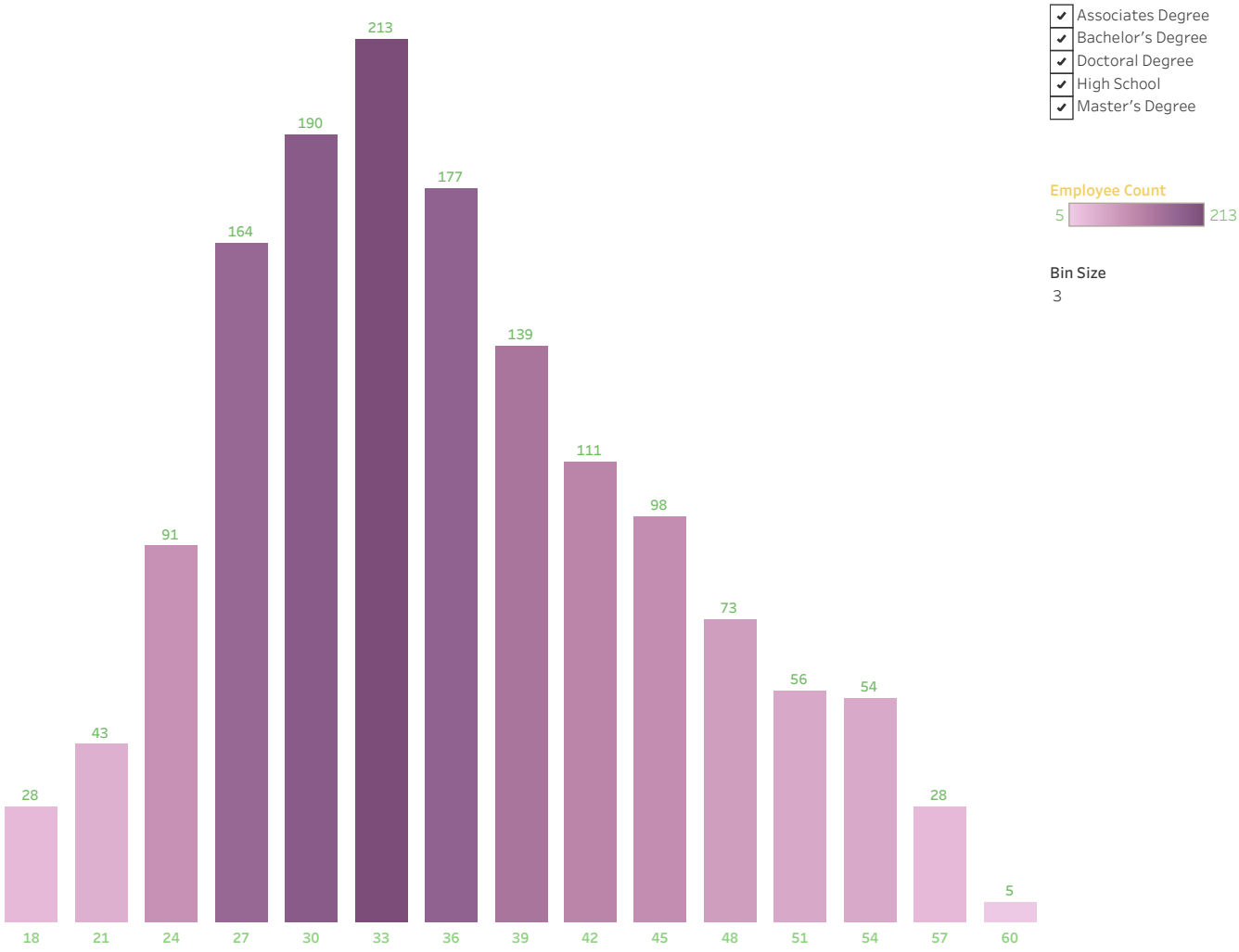

HR ANALYTICS STORYLINE

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Education
- ✔ Associates Degree
- ✔ Bachelor's Degree
- ✔ Doctoral Degree
- ✔ High School
- ✔ Master's Degree

Employee Count
10 112

HR ANALYTICS STORYLINE

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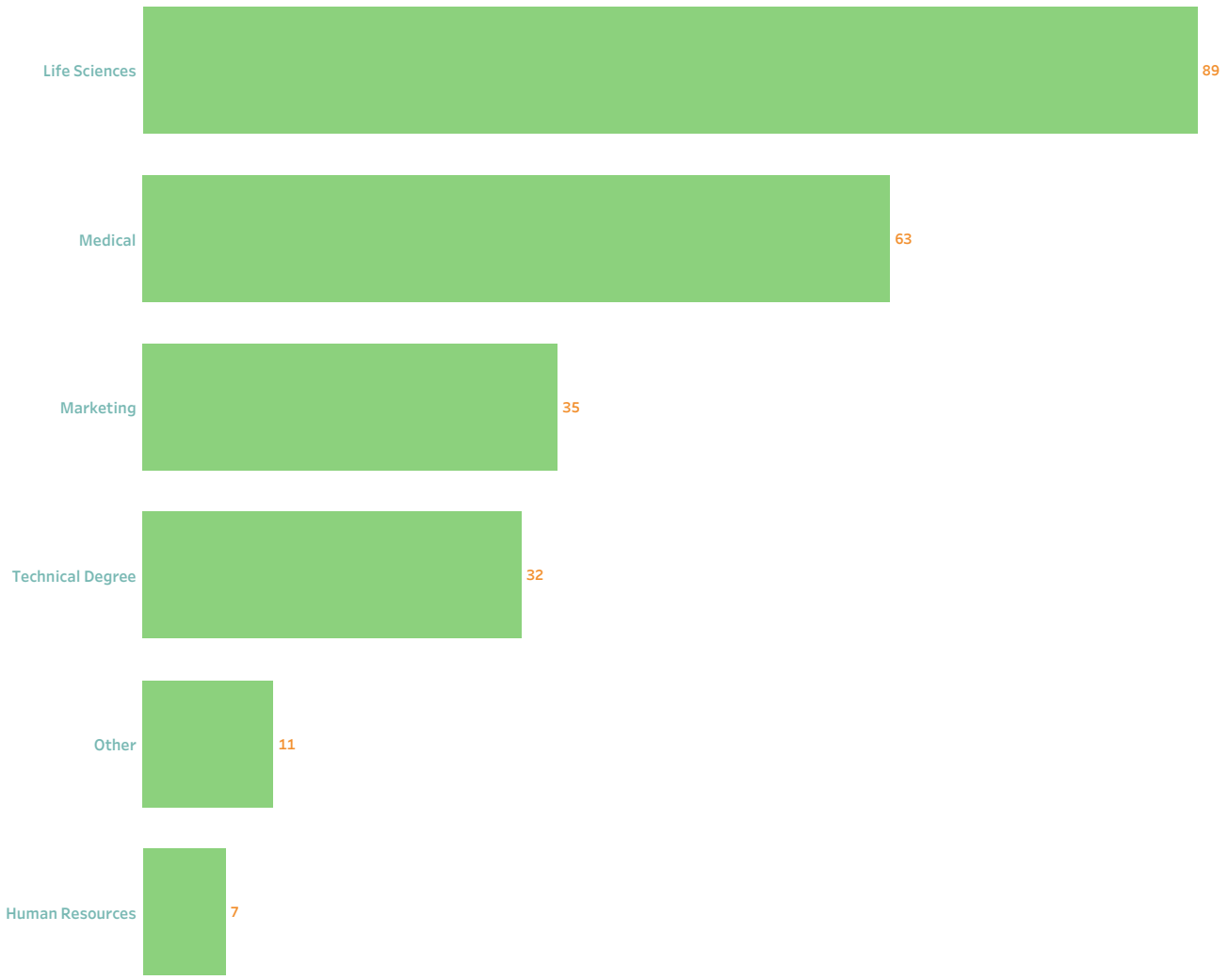

HR ANALYTICS STORYLINE

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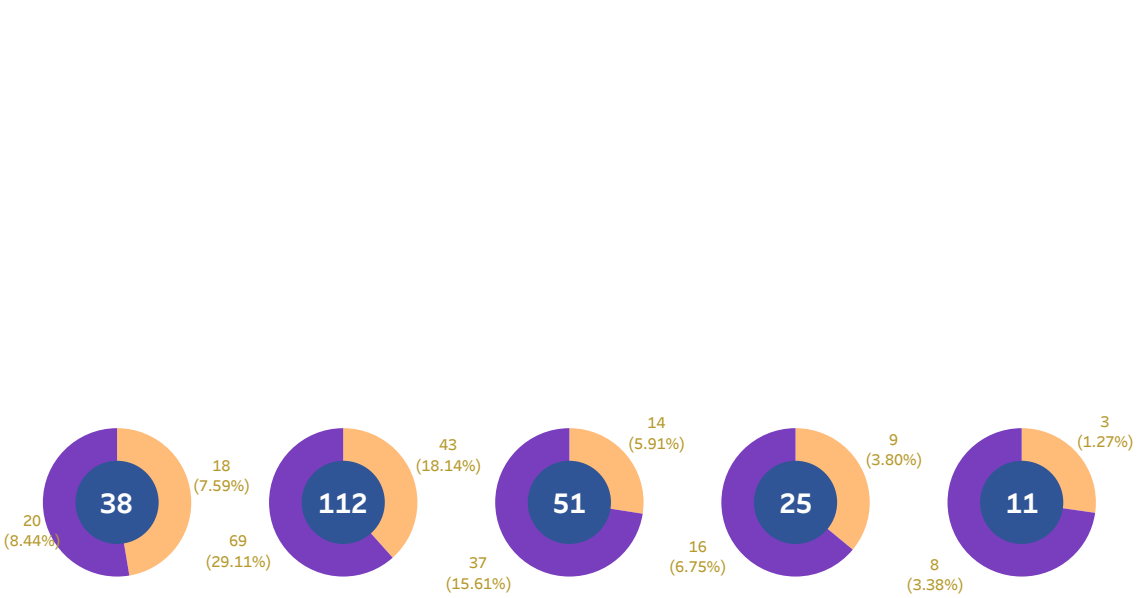

RESULT

HR analytics is the process of collecting and analyzing Human Resource (HR) data in order to improve an organization's workforce performance. The process can also be referred to as talent analytics, people analytics, or even workforce analytics. This method of data analysis takes data that is routinely collected by HR and correlates it to HR and organizational objectives.

Doing so provides measured evidence of how HR initiatives are contributing to the organization's goals and strategies.

ADVANTAGES & DISADVANTAGES

Advantages

Speed: Tableau can process large datasets quickly, enabling real-time .

Interactivity: Interactive dashboards with filters and parameters empower users to explore data. *Scalability:* Tableau can scale to accommodate the evolving needs of an organization as it grows.

Collaboration: Users can collaborate on dashboards and share them easily within the organization using Tableau Server.

Disadvantages

- *Cost:* Tableau can be expensive, especially for enterprise-level deployments.

- *Learning Curve:* Although user-friendly, there is a learning curve to master all of Tableau's features, particularly for complex analysis.

  Data Preparation: Data cleansing and preprocessing may need to be done outside of Tableau, as it's not a data preparation tool.

  Performance: Handling extremely large datasets can sometimes lead to performance issues.
  Data Security: Ensuring data security and compliance with privacy regulations is the responsibility of the organization, and this can be challenging.

  Maintenance: Keeping Tableau dashboards up to date and relevant requires ongoing effort and resources.

3 APPLICATIONS

The areas this solution can be apply are recruitment , talent acquisition , employee retention ,employee engagement, workforce planning , performance management , cost optimization , employee satisfaction , employee feedback etc.,

4 CONCLUSION

Leveraging Tableau for HR analytics offers a data-driven solution that empowers organizations to make informed decisions. It enhances recruitment, reduces turnover, and optimizes employee engagement.

However, implementation costs and a learning curve must be considered.

Data quality and security are critical, and continuous improvement is essential for ongoing success in using Tableau for HR analytics.

Some findings

1. From this department wise attrition chart, it is clear that Research and Development i.e., R&D has higher rate of about 56.12%.
2. From the representation of employees by age group, maximum is at the age of 32-34 of about 213 and least is 60 years and 5 employees is at the band.
3. 112 employees from Sales executive role rated 4 by their job satisfaction, 80 Laboratory Technicians follow the list while 69 Sales executive rate 1 for job satisfaction.

4. 89 employees are from Life Sciences background, Medical science scores second with 63 employees while 7 are from Human Resource background.

5. 112 employees in 25-34 age groups are attrit.

5 FUTURE SCOPE

Tableau in HR Analytics are having more scope in future.

1. Increased use of AI and machine learning: The use of AI and
machine learning in HR analytics is expected to increase, allowing businesses to make more accurate predictions and data-driven decisions.
2. Greater emphasis on employee experience: HR analytics will
focus more on employee experience, including employee engagement, satisfaction, and well-being.
3. More emphasis on diversity and inclusion: HR analytics will
play a more significant role in promoting diversity and inclusion in the workplace.
4. Greater use of predictive analytics: Predictive analytics will
become more prevalent in HR analytics, allowing businesses

to predict future trends and make data-driven decisions accordingly.

5. Increased focus on skills development: HR analytics will play
a more significant role in identifying skills gaps and developing training programs to address them.

AI-Driven Insight ,Advanced Predictive Modeling ,Real-Time Analytic ,Augmented Analytics ,Natural Language Processing ,Enhanced Mobile Experience ,Cybersecurity Measures ,Industry-Specific Templates ,Increased Customization ,Expanded Data Sources ,etc.,.


thank you!