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NM2023TMID13456

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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.

1 INTRODUCTION

1.1 Overview

A brief description about our project

The HR analytics project using Tableau is using Tableau is designed to provide insights into key metrics and trends related to human resource management in an organization. Here's a brief description about HR Analytics data literacy with tableau:

- 1. Data source collection: First to Collect HR data from various sources, such as HRIS systems, spreadsheets, or surveys. Here we can use Human resource data can include information about employees and more.
- 2. Data Preparation: The process of preparing raw data so that it is suitable for further processing and analysis.
- 3. Connecting to Tableau: Connect the data source into Tableau.
- 4. Applying filters: IT can be use to remove choices in order to simply the task. Here we can use EDUCATION filters and parameters for eliminate inappropriate options .
- 5. Create visualization: In Tableau drag-and-drop the interface to explore the HR data and to create various visualizations to identify trends, patterns, and outliers.
- 6. Exporting Dashboard: It is the best way to share the entire Dashboard to build interactive dashboards in Tableau to present key HR metrics and insights.

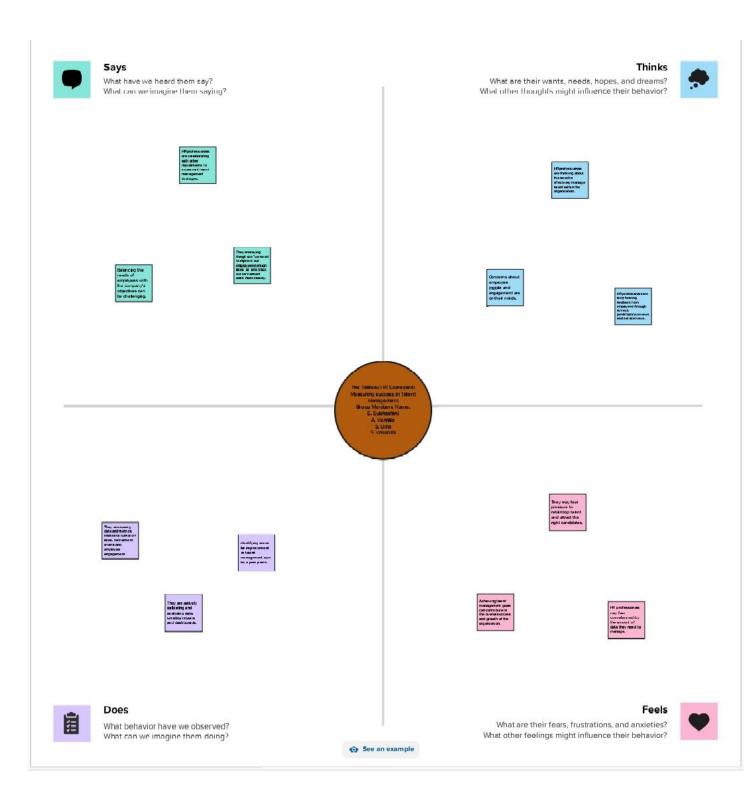
Dashboards can include multiple visualizations like bar charts, line graphs, and tables.

- 7. Storytelling: Use Tableau to tell a 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.

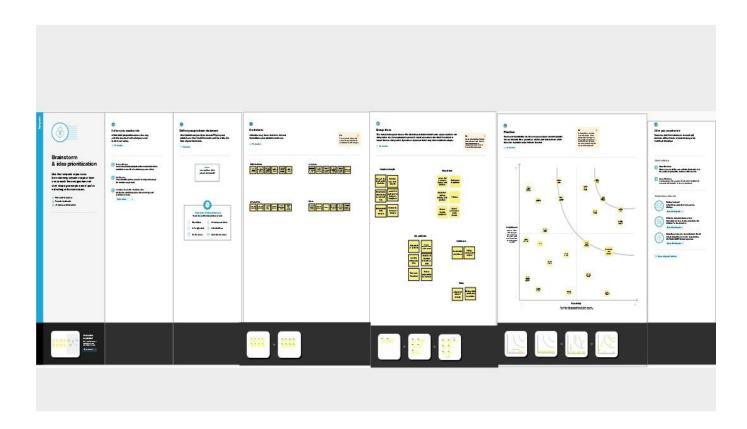
Different visualizations

- 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:
- 1.Improving recruitment and talent acquisition
- 2. Managing employee performance and productivity
- 3. Enabling effective workforce planning
- 4. Easily conducting skills gap analyses
- 5.Boosting learning and development ,upskilling and reskilling .
- 6.Identifying inefficiencies.
- 2 Problem Definition & Design Thinking
 - 2.1 Empathy Map:



2.2 Brainstorming Map:



3.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

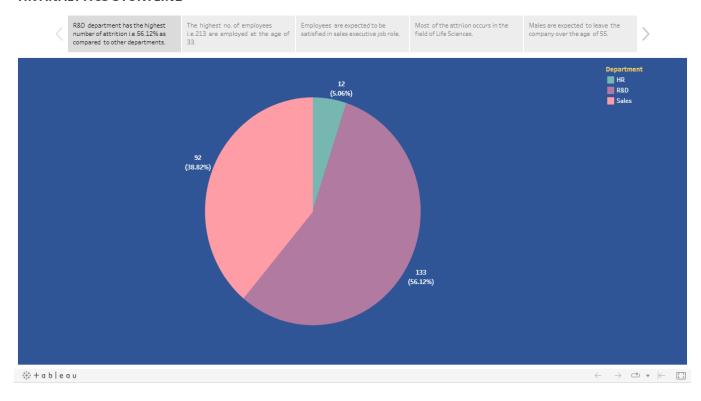
takes data that is routinely collected by HR and correlates it to HR and organizational objectives. Doing so provides measured evidence of how HR initiatives are contributing to the organization's goals and strategies.

HR ANALYTICS DASHBOARD:

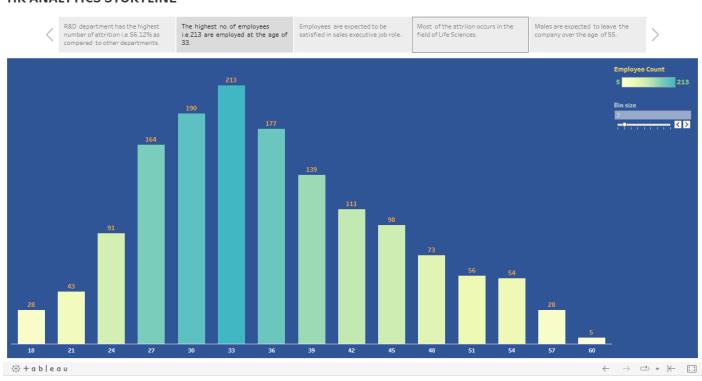


HR ANALYTICS STORYLINE:

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R&D department has the highest number of attrition i.e.56.12% as compared to other departments.

The highest no. of employees i.e.213 are employed at the age of 33.

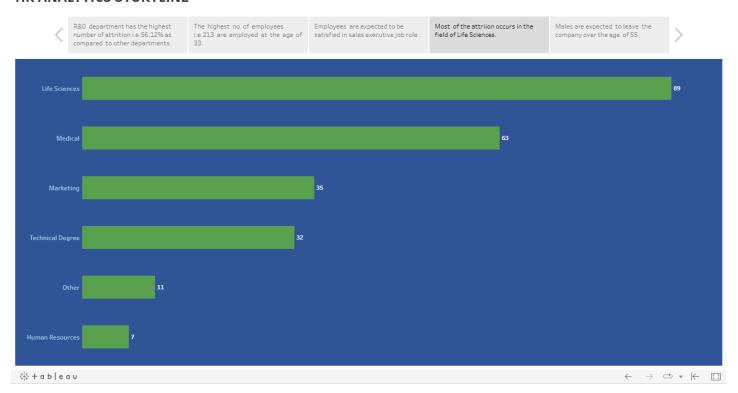
Employees are expected to be satisfied in sales executive job role.

Most of the attriion occurs in the field of Life Sciences.

Males are expected to leave the company over the age of 55.

Job Role	Jub Satisfaction					Employee Count
	1900-01-01	1900-02-01	1900-03-01	1900-04-01	Grand Total	10 11
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	

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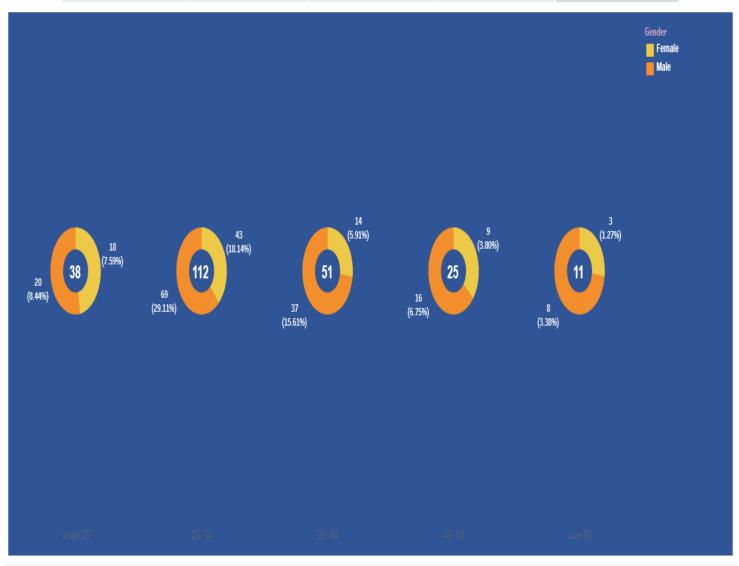
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Benefits of HR Analytics:

- 1.Enhanced Employee Engagement: Visualizing employee survey data in Tableau helps HR understand engagement levels.
- 2. Workforce Planning: Tableau assists in forecasting workforce needs, ensuring that your organization has the right talent in place to meet future demands.
- 3. Talent Development: You can analyze performance metrics and training data to identify high potential employees.
- 4. Continuous Improvement: Regularly update and refine your Tableau HR analytics project to reflect changing HR dynamics and business needs.
- 5. 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.
- 6. Communication and Transparency: Share Tableau dashboards with leadership and employees to promote transparency and open communication about HR related matters.

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:

GOAL OF DATA ANALYSIS:

Data analysis is the process of inspecting ,cleansing,transforming and modeling data with the goal of discovering useful information ,informing conclusion and support decision -making.

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. Scope of HR Analytics:

Human Resources (HR) Analytics is the process of using data analysis to inform and improve HR strategies and decision-making. As businesses continue to embrace digitalization ,the importance of HR Analytics is increasing .

HR Analytics is a rapidly growing field that is transforming the way that HR professionals work .

The objective of HR Analytics is to identify trends and patterns in employee data to better understand workforce behavior.

It covers a wide range of topics, including statistical analysis ,data visualization and predictive modeling .

Therefore, the scope of HR Analytics is immense, as organization seek professionals who can help them to make data-driven decision.

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

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.

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.

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.,. Increased focus on skills development: HR analytics will play

a more significant role in identifying skills gaps and developing training programs to address them.

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. More emphasis on diversity and inclusion: HR analytics will

play a more significant role in promoting diversity and inclusion in the workplace .

5. 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.

6.CONCLUSION:

HR Analytic courses can also help professionals to Advance in their careers and stay up to with latest trends and best practices in HR.As they offer students a Unique set of skills that are highly valued in todays job market. The insights gained from HR Analytics can help organizations to improve their HR process ,leading to increased efficiency and effectiveness. HR should be a key consideration in strategic decisions made within organizations.

Graduates of HR Analytics courses are well-positioned to work in a range of industries, including healthcare, finance, technology and manufacturing. They can work in a variety of HR roles, including HR Analyst, HR Manager and HR Director.

Therefore, individuals who are interested in pursuing a career in HR should consider enrolling in an HR Analytics course to gain the skills and knowledge they need to succeed in this exciting field.

