

Business Intelligence

Assignment 1

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TOPIC: "Empowering Workforce Insights: A Comprehensive HR Analytics Dashboard Analysis"

Introduction

HR Analytics Dashboard Project Using Tableau

The HR Analytics Dashboard created using Tableau provides a holistic view of workforce data, enabling HR professionals to make informed, data-driven decisions. This dashboard is designed to offer key insights into various aspects of human resource management, including job distribution, gender diversity, salary trends, employee growth, and qualification impacts on compensation. By leveraging powerful visualizations and analytical tools, it empowers HR teams to identify patterns and enhance strategic planning.

The dashboard includes several critical visualizations, such as:

- **Job Role Distribution:** A breakdown of the number of employees in each job role.
- **Gender Diversity:** A pie chart showing the gender ratio in the workforce.
- **Salary Insights:** Visual comparisons of average salaries across different job roles, highlighting which positions pay the most.
- **Top Earners:** Identification of top-earning employees and their respective roles.
- **Staff Growth Trend:** A time series analysis of recruitment trends from 2019 to 2023.
- **Age Distribution:** An age-wise distribution of employees, aiding in demographic analysis and succession planning.
- **Qualification vs. Salary:** A box plot comparing salaries based on educational qualifications.

Additionally, the dashboard incorporates interactive elements, allowing users to filter data by employee name, gender, or starting letter, providing a deeper dive into specific datasets. This feature enhances the ability to analyze departmental or role-specific data, making it easier to uncover trends and outliers.

Overall, this HR Analytics Dashboard in Tableau is an invaluable tool for HR professionals seeking to optimize workforce management. By visualizing complex HR data in an easy-to-understand format, it aids in identifying growth opportunities, fostering employee engagement, and ensuring equitable compensation structures, ultimately driving organizational success.

Problem Statement

Managing a diverse workforce requires continuous monitoring of various HR metrics. Key challenges that this dashboard aims to address include:

1. Identifying how employees are distributed across different roles.
2. Understanding which job roles offer the highest compensation.
3. Monitoring gender diversity to ensure inclusivity.
4. Tracking employee growth over time to evaluate recruitment effectiveness.
5. Analyzing the correlation between qualifications and salary.
6. Identifying high-performing employees to ensure they are compensated fairly.
7. Evaluating employee age distribution for succession planning.

Dataset Description

The dashboard is built on a dataset that likely includes the following key attributes:

- **Employee Information:**
 - **Emp ID:** Unique identifier for employees.
 - **Name:** Full name of the employee.
 - **Gender:** Male or Female classification.
 - **Age:** Employee age, binned into categories (20-30, 30-40, etc.).
 - **Date of Joining:** Year of entry into the organization.
- **Job Details:**
 - **Job Title:** The role of the employee (e.g., Product Manager, Research Scientist).
 - **Leave Balance:** Number of remaining leave days.
- **Salary & Earnings:**
 - **Salary:** Monthly or yearly compensation.
 - **Top Earners:** Highlighted based on their earnings.
- **Educational Background:**
 - **Qualification:** Level of education (High School Diploma, Bachelor's, Master's).

Detailed Insights and Analysis

1. Job Distribution

- **Observation:**
 - The highest number of employees are in operational roles like **Packaging Associate** and **Production Operator**.
 - Specialized roles such as **Marketing Manager** and **Chocolatier** have fewer employees, indicating either niche skills or limited demand.
- **Implications:**
 - Over-representation in certain roles may suggest redundancy or a lack of diversity in responsibilities.
 - Under-represented roles could signal potential skill shortages.

2. Gender Distribution

- **Observation:**
 - The workforce is slightly female-dominated, with **9 females** and **7 males**.
- **Implications:**
 - This reflects positive gender diversity, but further analysis could explore if this distribution is balanced across all job roles or concentrated in specific areas.
- **Recommendation:**
 - Implement gender-neutral hiring practices to maintain inclusivity across all job levels.

3. Salary Distribution by Job Title

- **Observation:**
 - Roles like **Product Manager** and **Research Scientist** have higher average salaries (₹60K–₹80K), while operational roles like **Sales Representative** and **Packaging Associate** earn around ₹20K–₹40K.
- **Implications:**
 - This salary disparity may reflect the level of expertise and responsibilities associated with the roles.
- **Recommendation:**

- Regularly benchmark salaries to ensure competitive compensation, especially for lower-paying roles, to retain talent.

4. Top Earners by Job

- **Observation:**
 - Employees such as **Rhea Bhatia**, **Rhea Saxena**, and **Vic Rudolf** are among the top earners, suggesting they hold strategic or leadership roles.
- **Implications:**
 - Recognizing top earners helps identify key contributors and informs decisions on rewards and retention strategies.

5. Staff Growth Over Time

- **Observation:**
 - Significant employee growth from **2019 to 2023**, peaking at **88 new hires in 2023**.
- **Implications:**
 - Rapid growth indicates business expansion but may require strengthening onboarding and training processes to maintain performance levels.
- **Recommendation:**
 - Analyze the attrition rate alongside growth to ensure sustainable workforce expansion.

6. Age Distribution of Staff

- **Observation:**
 - The majority (51.76%) of employees fall into the **20-30 age group**, indicating a young workforce.
- **Implications:**
 - Younger employees may bring innovation but could lack experience.
 - Succession planning is critical to prepare for future leadership.
- **Recommendation:**
 - Introduce mentorship programs to bridge the experience gap and retain younger talent by offering career progression paths.

7. Qualification vs. Salary

- **Observation:**
 - Higher qualifications, such as **Master's Degrees**, correlate with higher salaries.
 - Employees with **High School Diplomas** and **Bachelor's Degrees** earn comparatively less.
- **Implications:**
 - Education level is a key factor in salary determination, but experience and skill development should also be considered.
- **Recommendation:**
 - Encourage continuous learning and certifications for employees with lower qualifications to increase their earning potential.

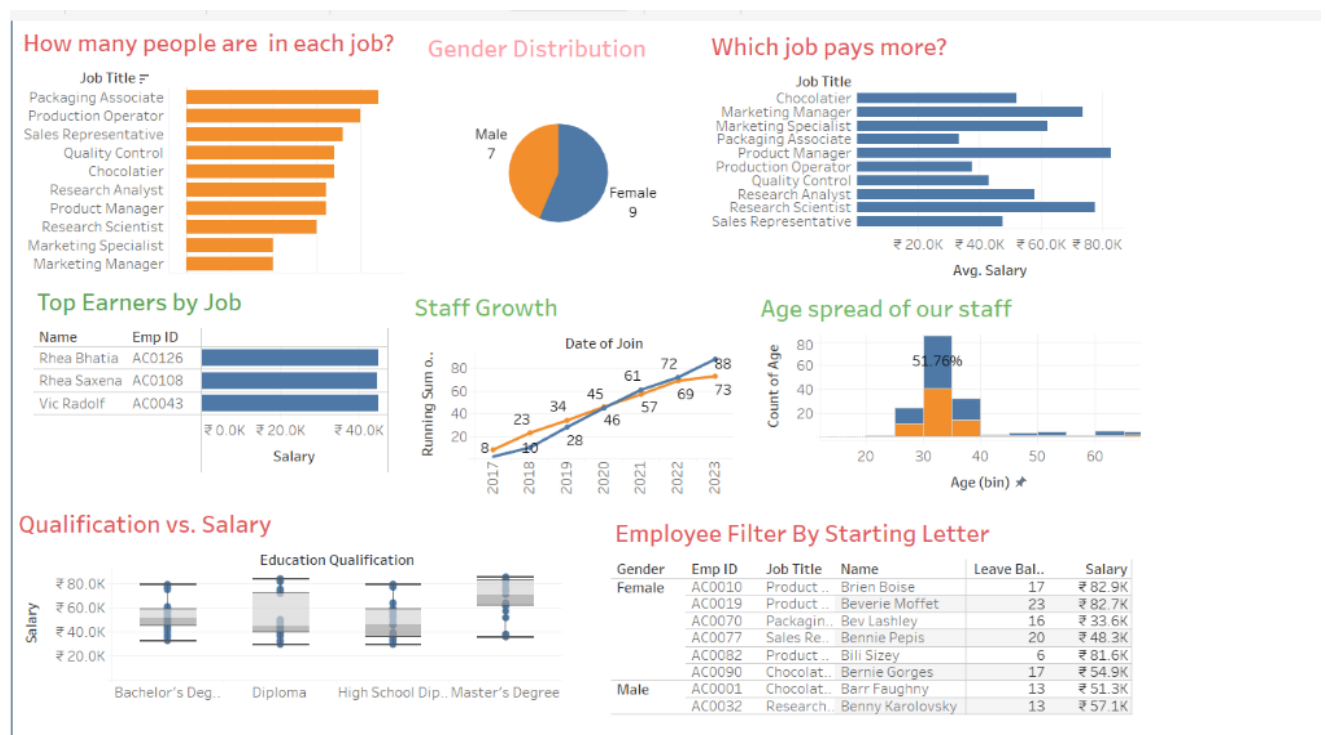


Fig: HR Analytics Dashboard Project Using Tableau

Link: [HR Analysis 1 | Tableau Public](#)

Conclusion and Recommendations

The dashboard provides valuable insights into the organization's HR landscape. To improve HR policies and workforce management:

1. **Balanced Job Distribution:** Reassess job roles with high employee concentration and enhance recruitment for under-represented roles.
2. **Fair Compensation:** Regularly review and adjust salary structures to maintain fairness and competitiveness.
3. **Diversity Initiatives:** Continue promoting gender diversity and ensure equal opportunities in all job roles.
4. **Retention Strategies:** Identify high-performing individuals and develop retention programs like bonuses or promotions.
5. **Talent Development:** Launch upskilling programs and mentorship initiatives to prepare employees for future leadership roles.

By leveraging these insights, HR can implement strategic decisions that foster a thriving, diverse, and motivated workforce.



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Presented to

Chaithra Shree. P

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