### Team 3

### **members**

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### Department Dashboard **Overview:**

This dashboard provides a detailed overview of key department metrics within an organization. It focuses on three primary areas:

* **Manager Performance**: Lists the top 10 managers based on performance score and the number of employees under each.
* **Turnover Rate**: Displays the department-wise turnover rate, highlighting areas of concern such as Production with the highest rate.
* **Employee Satisfaction**: Tracks satisfaction levels across different departments.
* **Termination Reasons**: Breaks down the reasons for employee termination, providing insights into why employees are leaving the company.
* **Average Salary by Department**: Compares average salaries across departments, revealing disparities in compensation.

**Data Visualization Concepts:**

* **Bar Charts**: Used to display both **turnover rates** and **average salary by department**. These charts are effective for comparing numbers across categories, making it easy to spot anomalies like the high turnover in Production and the high salaries in Executive Offices.
* **Line Graph**: The **employee satisfaction by department** is shown as a line graph, offering a clear trend analysis. It shows the fluctuations of satisfaction across departments, highlighting potential areas of concern.
* **Pie Chart**: The **termination reasons** pie chart gives a proportional view of why employees are leaving. Categories like "unhappy" and "another position" stand out, allowing for easy comparison.
* **Table**: The **top 10 managers** section lists key performance data, presenting the information in a structured format for easy comparison.

**Insights:**

* **Turnover in Production**: The Production department has the highest turnover rate (28%), a critical concern for HR and management. This suggests the need for intervention in employee retention strategies for that department.
* **Top Manager Performance**: Janet King is the top manager with the highest average performance score (3.11), indicating strong management and oversight of her team.
* **Salary Discrepancy**: The Executive Office department has the highest average salary at 250K, much higher than other departments like Production (60K) and Sales (69K). This suggests significant salary discrepancies between leadership roles and other departments.
* **Employee Satisfaction**: Satisfaction seems to be highest in the Executive Office and relatively low in IT/IS and Production. This may point to dissatisfaction in technical and production roles, possibly contributing to the higher turnover rates.
* **Reasons for Termination**: Most terminations are due to "another position" (19) and "unhappy" (14), pointing to issues with employee engagement and retention strategies.

### Employee Diversity Dashboard **Overview:**

This dashboard provides insights into **employee diversity**, **loyalty**, **hiring trends**, and **salary distribution** across different roles. It aims to give a holistic view of the workforce composition, recruitment sources, and the age distribution of employees by department.

Key areas covered:

* **Employee Loyalty**: Lists the top 10 loyal employees by performance score and years of service.
* **Diversity Metrics**: Breaks down employee demographics by race and gender.
* **Salary Distribution**: Shows average salary by position, giving a clear view of compensation differences across roles.
* **Hiring Trends**: Tracks recruitment numbers across the years.
* **Age Distribution**: Analyzes employee age distribution by department.

**Data Visualization Concepts:**

* **Pie Charts**: These are used effectively to represent diversity metrics by **race** and **gender**. The proportions of each demographic are easily visible, showing the composition of the workforce at a glance.
* **Bar Charts**:
  + The **average salary by position** bar chart allows a quick comparison of compensation across roles like President, CIO, IT Director, and Data Architect.
  + The **hiring trend** chart shows recruitment data over time, highlighting years with significant hiring spikes.
* **Line Chart**: Displays the **age distribution by department**, providing a trend of average employee age across various departments, which can be useful for workforce planning.
* **Tree Map**: The **recruitment source breakdown** uses a tree map to visually represent the proportion of hires from different sources such as Indeed, LinkedIn, Google Search, and Employee Referrals.
* **Table**: The **top 10 loyal employees** section uses a table format to present performance scores and years of service, offering a clear way to view loyalty in relation to employee tenure.

**Insights:**

* **Diversity**: The workforce is 57% female and 43% male, with 60% identifying as White and 26% as Black or African American. This suggests a relatively diverse workplace, but there is still room for improvement in gender balance at senior levels.
* **Employee Loyalty**: Long-serving employees like **Torrence Jack** (18 years) and **Brad Pitt** (17 years) with high performance scores (Exceeds) reflect strong employee retention and loyalty in higher positions.
* **Salary Gaps**: The salary distribution shows clear gaps between leadership roles and mid-level positions. For instance, the **President & CEO** earns 250K, while **IT Manager** earns 157K. This disparity highlights the compensation gap across different levels of responsibility.
* **Hiring Trends**: The hiring trend graph shows a significant spike in hiring in 2010, with 83 new recruits, possibly indicating a company expansion or initiative. However, hiring dropped significantly in later years (1 in 2018), which may suggest stabilization or reduced recruitment efforts.
* **Age Distribution**: There’s a notable age difference between departments. For instance, the **Executive Office** has an older average age (70), while the **Admin Offices** have a younger workforce (39). This could affect succession planning and workforce management strategies.