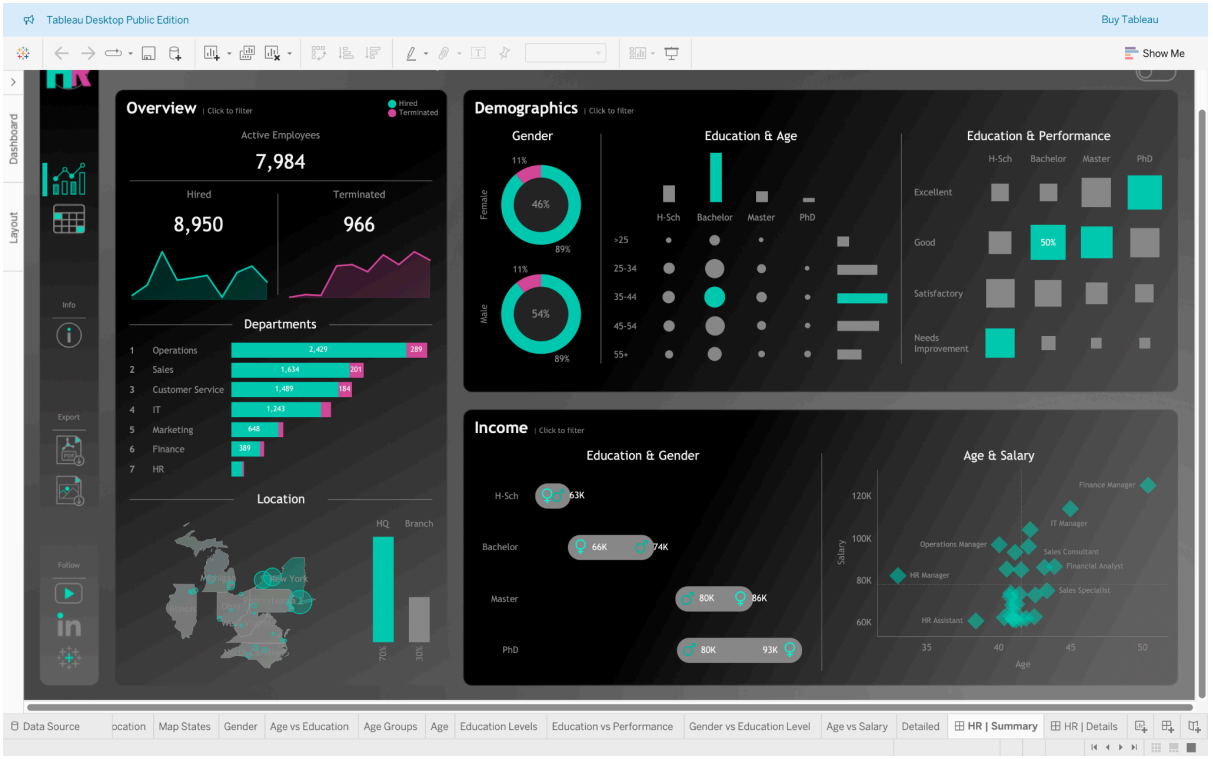
HR Dashboard Project Report



1. Project Overview

The HR Dashboard project aims to provide a comprehensive view of an organisation's human resources data through interactive and visually appealing Tableau dashboards. This dashboard enables HR managers and business leaders to analyse workforce composition, monitor employee performance, and identify patterns in hiring, retention, and compensation.

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2. Objective

To create a Tableau dashboard that provides both **summary insights** and **detailed employee records**, allowing HR managers to make informed decisions based on real-time data.

Key goals:

- Simplify HR data visualisation for better understanding.

- Identify trends in hiring, terminations, and workforce demographics.
- Explore salary distribution and correlations with education, age, and gender.
- Enable dynamic filtering and interactive exploration of HR data.

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3. User Story

As an HR Manager,
I want a comprehensive dashboard to analyse human resources data,
so that I can gain both high-level insights and detailed employee-level information.

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4. Dashboard Views

The Tableau dashboard is divided into two main views:

A. Summary View

The **Summary View** presents the overall HR metrics through three main sections — **Overview**, **Demographics**, and **Income Analysis**.

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i. Overview

This section provides a snapshot of the organisation's workforce and employment trends.

- Displays **Active Employees**, **Hired**, and **Terminated** counts.
- Shows a **trend chart** for hired vs. terminated employees over time.
- Highlights **Department-wise employee distribution** (e.g., Operations, Sales, IT, Marketing).
- Compares employees between **Headquarters (New York)** and **Branch locations**.
- Displays a **map visualisation** showing employees by **state and city**.

Insight Example:
Operations and Sales departments have the highest number of employees, while HR and Finance have the least.

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ii. Demographics

This section focuses on workforce composition.

- Shows **gender distribution** (male vs. female ratio).
- Displays **age group distribution** (e.g., <25, 25–34, 35–44, 45–54, 55+).
- Visualises **education levels** (High School, Bachelor, Master, PhD).
- Shows correlation between **education level** and **performance ratings**.

Insight Example:
Most employees hold a Bachelor's or Master's degree, with high performance ratings seen among those with advanced education levels.

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iii. Income Analysis

The Income section focuses on salary-related insights.

- Compares **average salary by education level and gender**.
- Highlights **salary trends across age groups**.
- Visualises **salary distribution by department and role**.
- Displays correlation between **age** and **salary** for various job titles.

Insight Example:
Employees with Master's and PhD degrees have higher average salaries, while younger employees in entry-level roles earn comparatively less.

B. Employee Records View

The **Employee Records** view provides a detailed table of all employees with fields such as:

- Name
- Department
- Job Title

- Gender
- Age
- Education
- Performance Rating
- Salary

Users can:

- Filter by any field (department, gender, education, or performance).
- Sort or search to locate specific employee information.
- Drill down from summary charts to individual employee data for deeper analysis.

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5. Dashboard Design Highlights

- **Dark theme layout** for modern, high-contrast visuals.
- **Colour palette:** Teal for active/hired and Pink for terminated.
- **Interactive filters** at the top of the dashboard (e.g., Department, Location, Education).
- **KPIs** at the top show total hired, terminated, and active employees.
- **Dynamic tooltips** for quick insight while hovering over charts.

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6. Key Insights

1. The majority of employees work in **Operations** and **Sales** departments.
2. **Male employees** slightly outnumber females in the workforce.
3. Most employees belong to the **25–34 age group** and hold a **Bachelor's degree**.

4. Employees with **higher education** tend to perform better and earn higher salaries.
5. **HQ (New York)** employs about 70% of the workforce.
6. **Age** and **salary** are positively correlated — senior employees earn higher pay.

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7. Tools & Technologies Used

- **Tableau Desktop Public Edition** – for dashboard creation and visualisation
- **Microsoft Excel / CSV dataset** – for data storage and preparation
- **Data Cleaning:** Null removal, type correction, standardisation
- **Data Fields Used:** Employee ID, Department, Gender, Age, Education, Performance, Salary, Location

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8. Conclusion

This HR Dashboard provides a powerful and interactive tool for monitoring workforce dynamics.
It helps HR managers identify key insights about hiring trends, performance, and compensation distribution.
With real-time updates and filters, it supports **data-driven decision-making** in areas like recruitment, retention, and salary planning.

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9. Future Enhancements

- Integrate with **live HR databases** for real-time updates.
- Include **time-series trend analysis** for monthly/quarterly changes.
- Add **attrition forecasting** using predictive analytics.
- Incorporate **employee engagement and satisfaction metrics**.