

# Data and Artificial Intelligence

## Cyber Shujaa Program

### Week 5 Assignment

#### Data Visualization using Tableau - HR

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#### Introduction

The objective of this project was to develop an **interactive Human Resources Dashboard** that provides both **high-level insights** and **detailed employee records** for the HR manager's decision-making.

The dashboard was designed in **Tableau Desktop Public Edition**, using a **Kenyan HR dataset (Excel format)**. It consists of two main parts:

1. **Summary Dashboard** – showing Overview, Demographics, and Income Analysis.
2. **Employee Details Dashboard** – showing a searchable and filterable list of all employees.

The goal is to make HR data **easy to explore, insightful, and visually engaging**.

## Task Completion

### 1 Overview Dashboard

The Overview Dashboard provides a summary of the workforce. It is divided into three sections: Overview, Demographics, and Income.

#### Overview Section

- Displays the total active employees.
- Shows hiring and termination trends over time.
- Highlights employee distribution across departments and locations within Kenya.

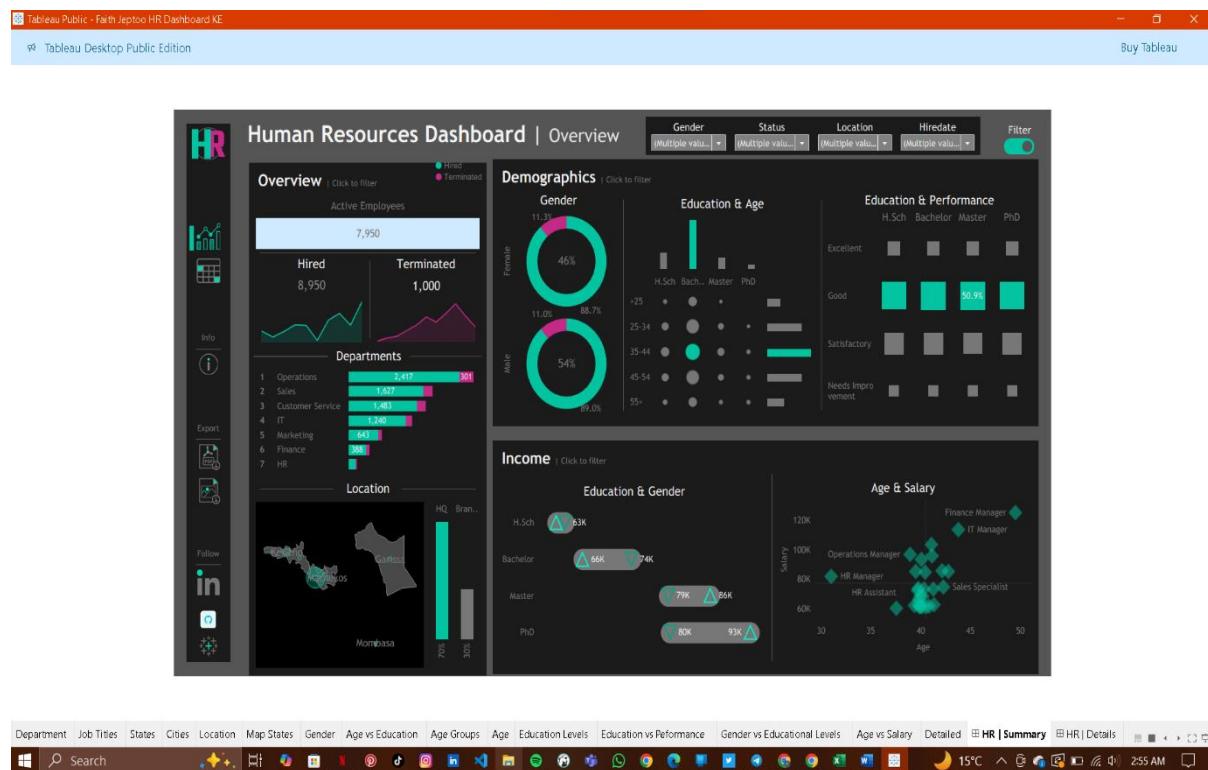
#### Demographics Section

- Shows the gender distribution of employees using donut charts.
- Displays the relationship between education level and age groups.
- Illustrates education and performance levels for workforce evaluation.

#### Income Section

- Presents salary comparisons by education and gender.
- Shows a scatter plot of age vs. salary to highlight income trends by job title.

**Filters:** The dashboard includes filters for *Gender*, *Status*, *Location*, and *Hire Date*, allowing the HR manager to focus on specific employee groups.



## 2 Employee Details Dashboard

The Details Dashboard presents a comprehensive list of all employees, allowing in-depth exploration and filtering.

Each record includes:

Field	Description
Employee ID	Unique employee identifier
Full Name	Employee name
Gender	Male/Female
Age	Employee's age
Education Level	Highest qualification
Department	Assigned department
Job Title	Employee position
Location	County or city
Salary	Displayed in Kenyan shillings (Ksh)
Status	Hired or Terminated
Length of Employment	Years employed

### Interactive Filters Available For:

- Department
- Job Title
- Gender
- Age Group
- Education Level
- State / City
- Hire Date / Termination Year
- Salary Range

These filters help HR managers instantly focus on specific employee categories.

Tableau Public - Fath Jeltoo HR Dashboard KE  
Tableau Desktop Public Edition

Buy Tableau

### Human Resources Dashboard | Details

**Employee List** Click arrows for filter options

Employee Id:  Full Name:  Gender:  Age Groups:  Education Level:

Demographics:  Role:  Graphics:  Salary: Ksh51,835 - Ksh149,377

Status:  Length of Employment:

Customer Service Helpdesk Technician Bondo Kisumu Ksh66,787 Hired 1st Jan 2019 - 6 years

Operations Inventory Specialist Kericho Kericho Ksh31,874 Hired 12/22/2023 - 2 years

Operations Operations Analyst Baringo Baringo Ksh88,579 Hired 11/13/2023 - 2 years

Finance Accountant Bonet Kericho Ksh62,543 Hired 10/15/2021 - 4 years

Sales Sales Specialist Nairobi Nairobi Ksh92,123 Hired 10/7/2016 - 9 years

Operations Logistics Coordinator Nairobi Nairobi Ksh64,807 Hired 9/17/2019 - 6 years

Finance Accountant Narok Narok Ksh70,778 Hired 10/6/2016 - 9 years

Operations Inventory Specialist Westlands Nairobi Ksh63,824 Hired 1/1/2022 - 3 years

Export Follow

Department Job Titles States Cities Location Map States Gender Age vs Education Age Groups Age Education Levels Education vs Performance Gender vs Educational Levels Age vs Salary Detailed HR | Summary HR | Details

### 3. Conclusion

The HR Dashboard provides both summary and detailed insights to support HR operations in Kenya. It enables data-driven decision-making through:

- Clear visualization of employee distribution and diversity.
- Transparent analysis of salary and education trends.
- Quick access to individual employee details via interactive filters.

This project demonstrates the use of Tableau for practical HR analytics and supports evidence-based management decisions.

### 4. Link to Final Tableau Dashboard

[https://drive.google.com/file/d/1\\_axyD9sSASe6rvaglyMBnDKLfubtLNr/view?usp=sharing](https://drive.google.com/file/d/1_axyD9sSASe6rvaglyMBnDKLfubtLNr/view?usp=sharing)