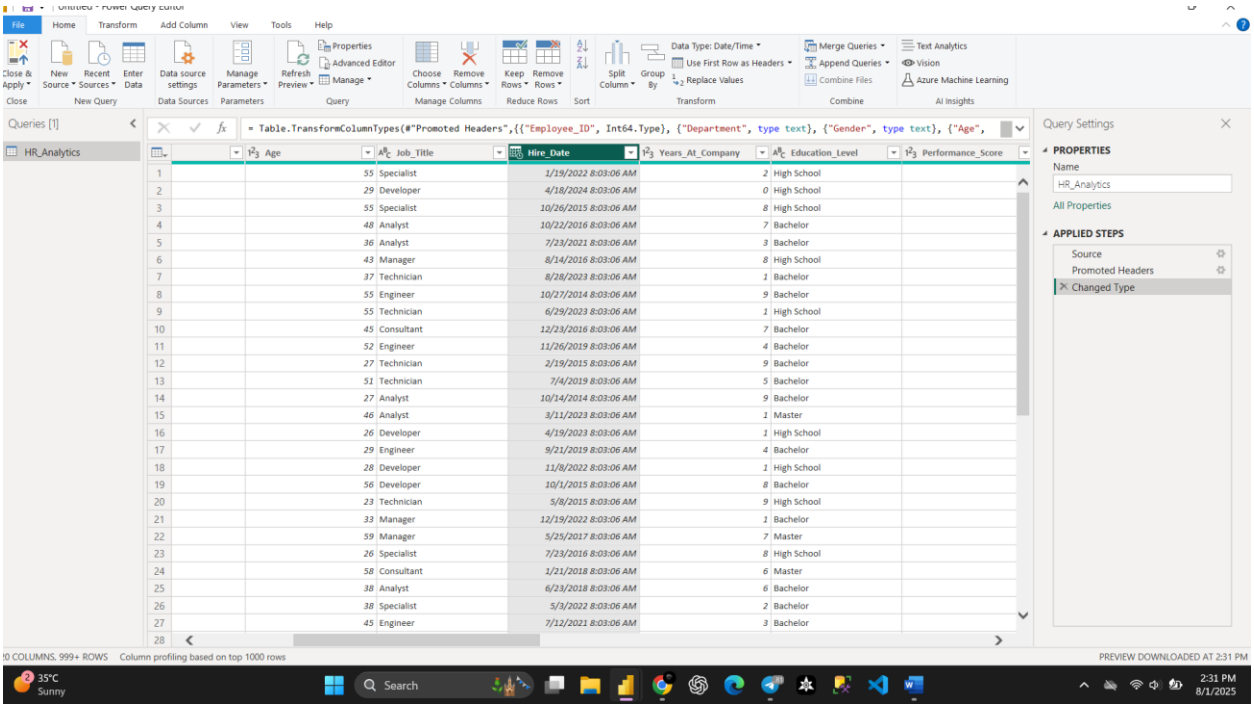
1. Project Objective To design and build a comprehensive HR Analytics Dashboard using Power BI, which helps HR managers and executives monitor employee performance retention trends, department-level KPIs, and engagement levels using interactive visuals, DAX measures, Power Query transformation, and publishing to the Power BI Online Service.
2. Dataset Details

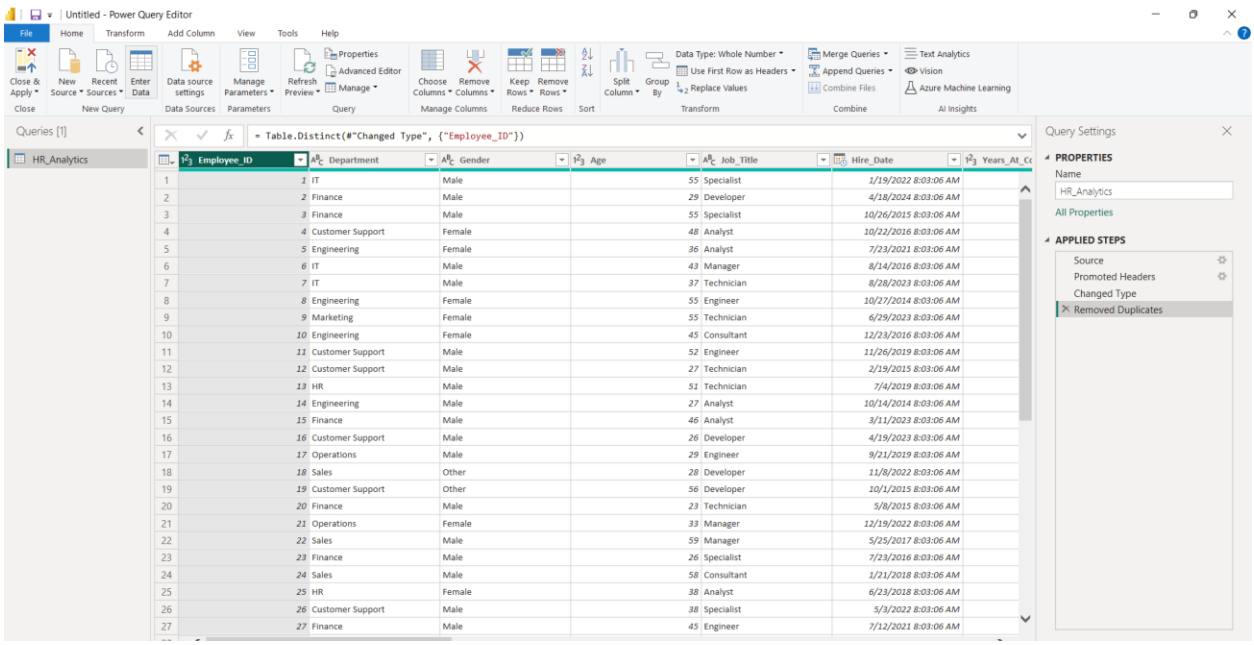
- Table Name: Employee_Performance
- Columns:
    - Employment_id
    - Department
    - Age
    - Job Title
    - Hire_Date
    - Years_at_company
    - Education_level
    - Performance_Score
    - Monthly_Salary
    - Work_Hours_per_Week
    - Project_Handled
    - Overtime_Hours
    - Sick_Days
    - Remote_Work_Frequency
    - Team_Size
    - Training_Hours
    - Promotions
    - Employee_Satisfaction_Score
    - Resigned (Yes/No)

3. Power Query Editor – Data Preparation Steps:

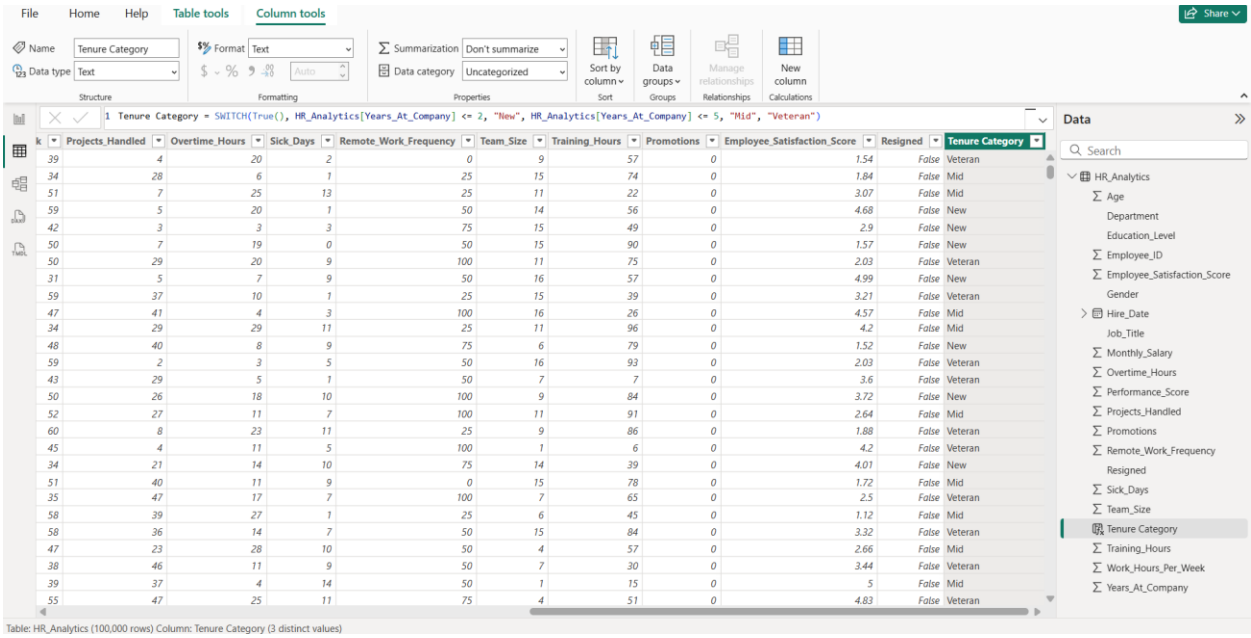
- Rename Columns to follow proper casing (e.g., Employment ID, Work Hours per Week).
- Change Data Types:
    - Dates: Hire_Date
    - Numeric: Monthly_Salary, Age, Years_at_company, etc.
    - Text: Job Title, Department, etc.



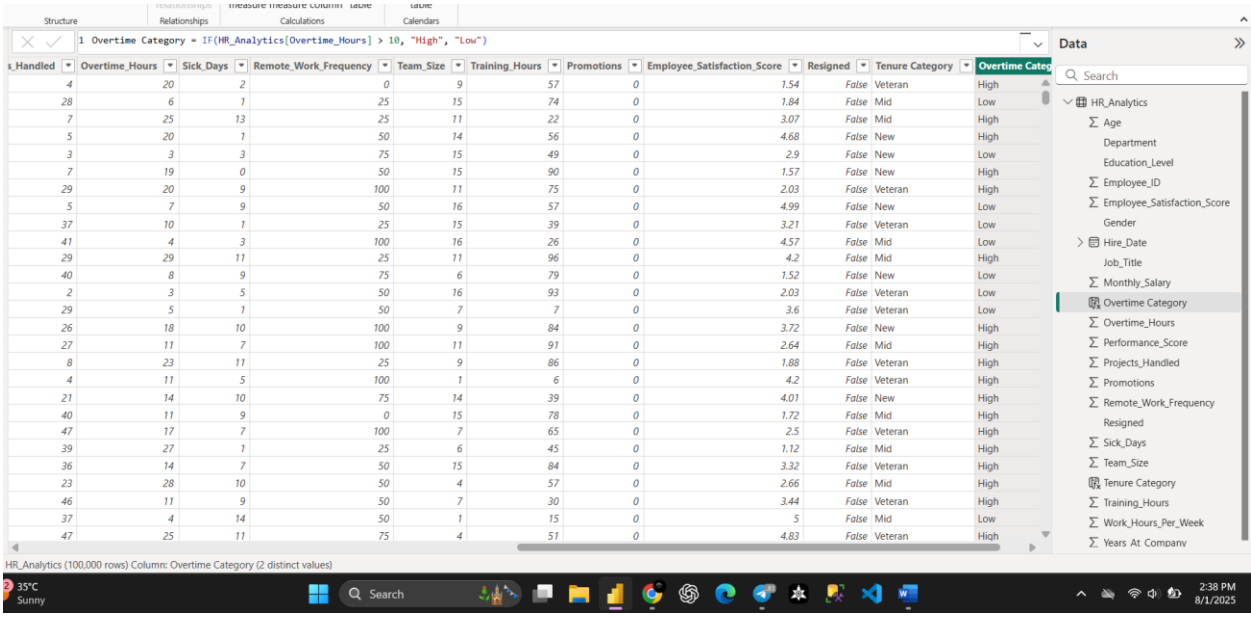
- Remove Duplicates on Employment_id.



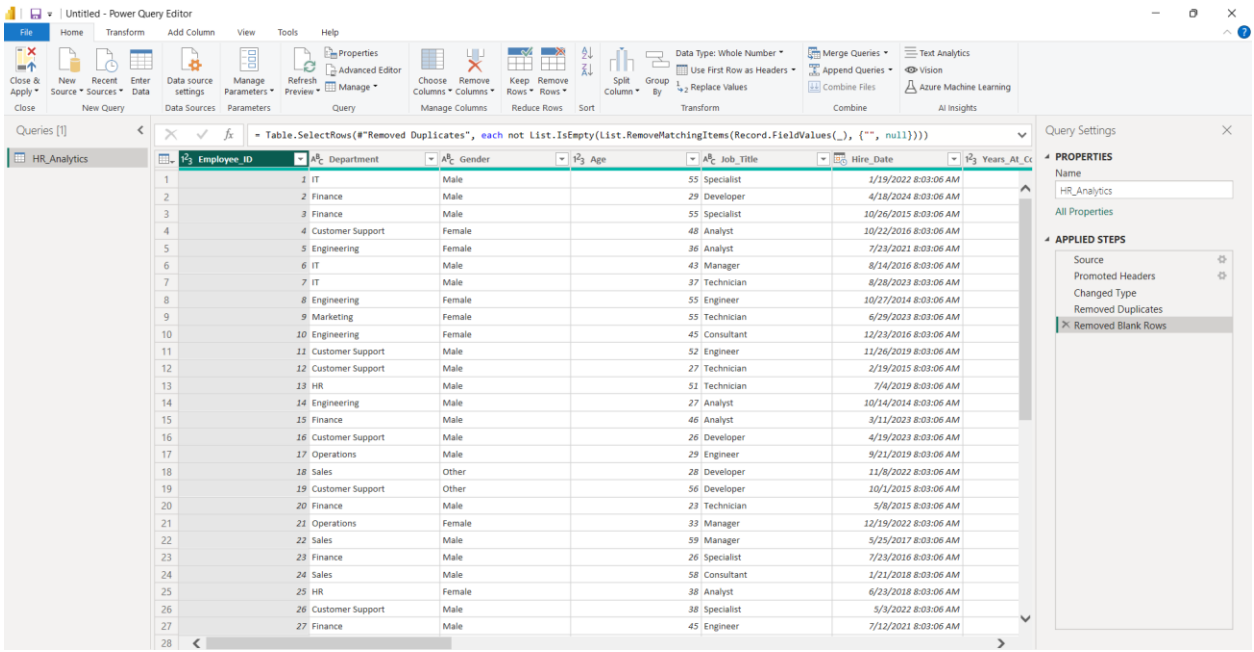
- Create Calculated Columns:
  - Tenure Category: Based on Years_at_company (e.g., 0-2 = New, 3-5 = Mid, 6+ = Veteran)



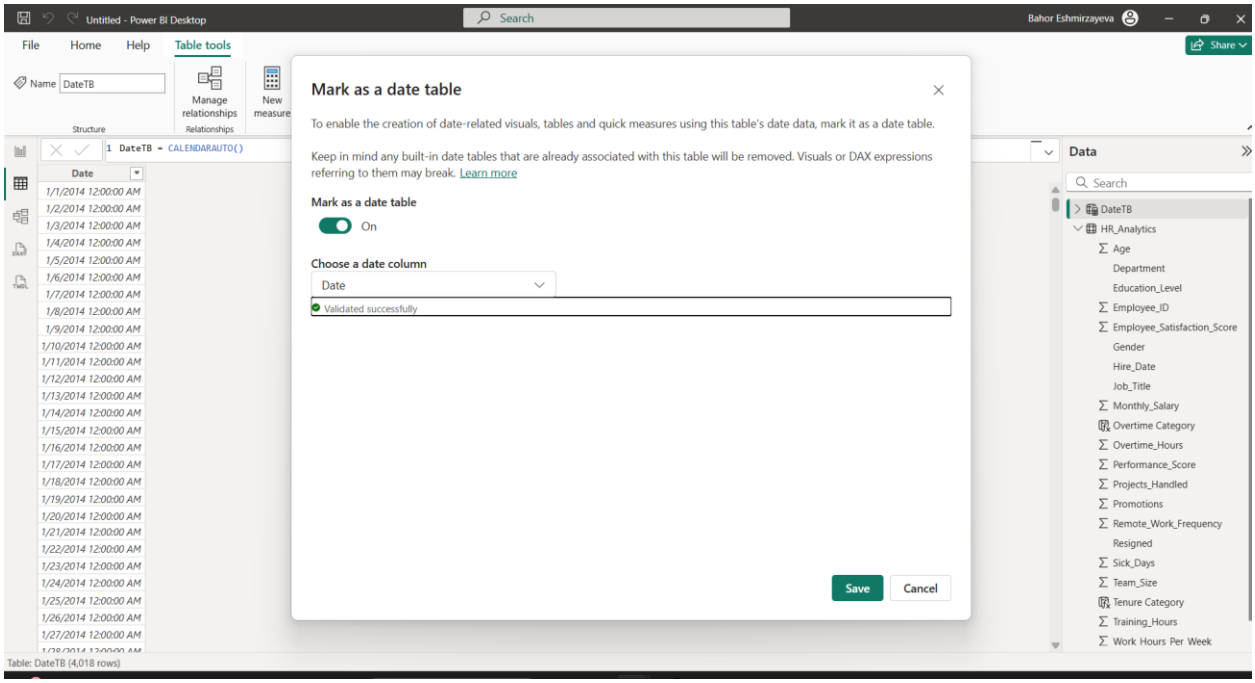
  - Overtime Category: IF Overtime_Hours > 10 THEN "High", ELSE "Low"



- Clean Null Values: Replace or remove rows depending on importance.

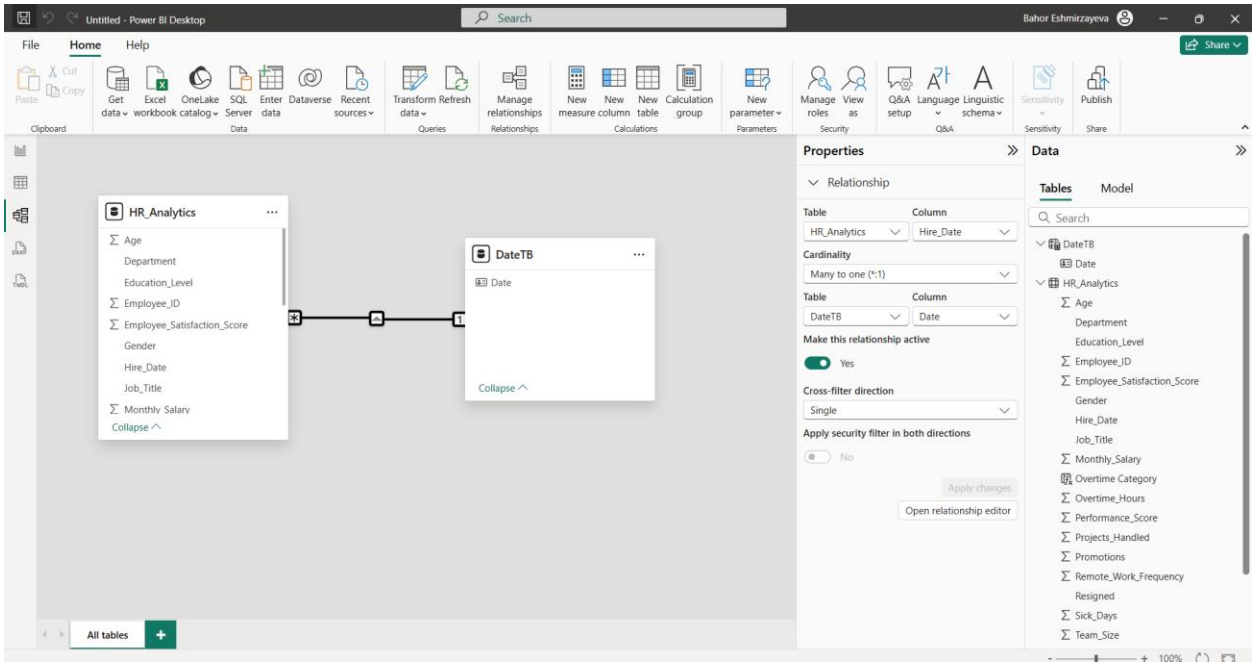


- Create Date Table: Mark as Date table, join with Hire_Date.



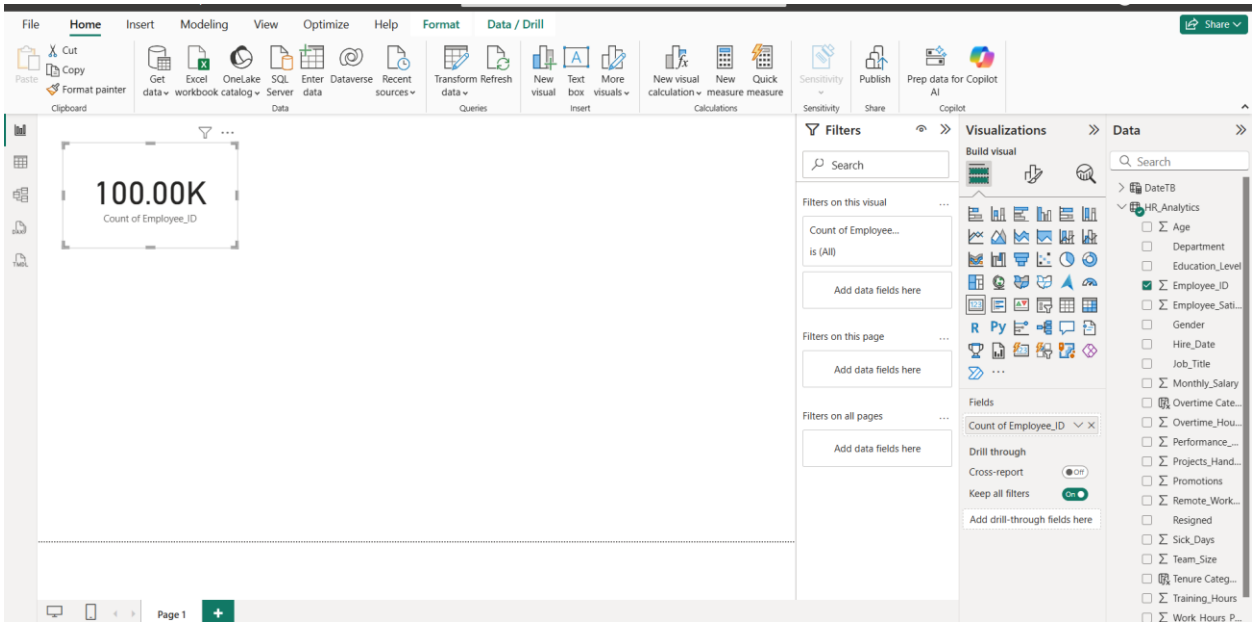
4. Data Model – Relationships

- Connect Date Table to Hire_Date (One-to-Many)
- Create simple star schema, ensure no circular dependencies
- Optionally: Create Lookup Tables for Department, Education_level, etc.

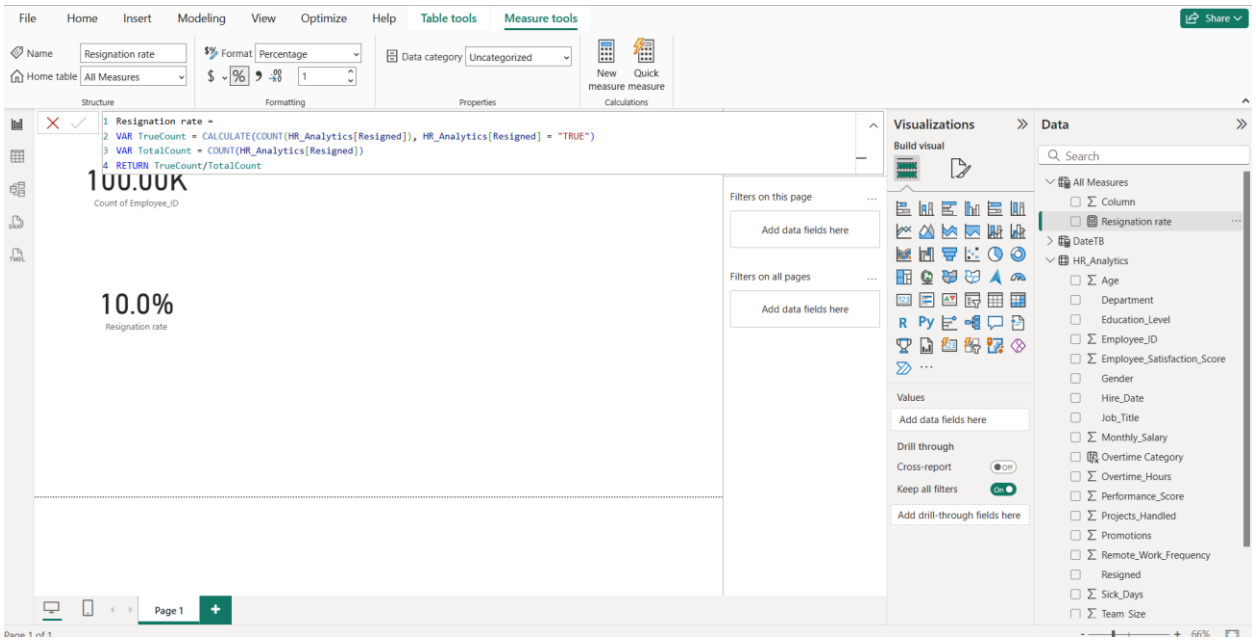


5. DAX Measures (Key KPIs)

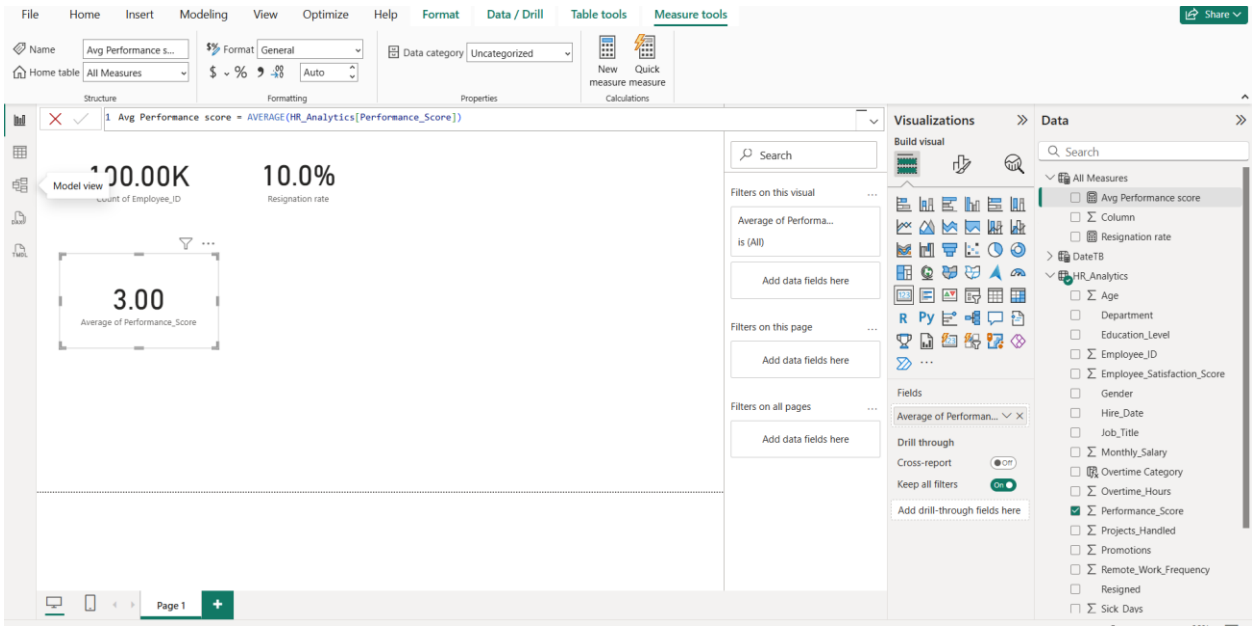
- Employee Count



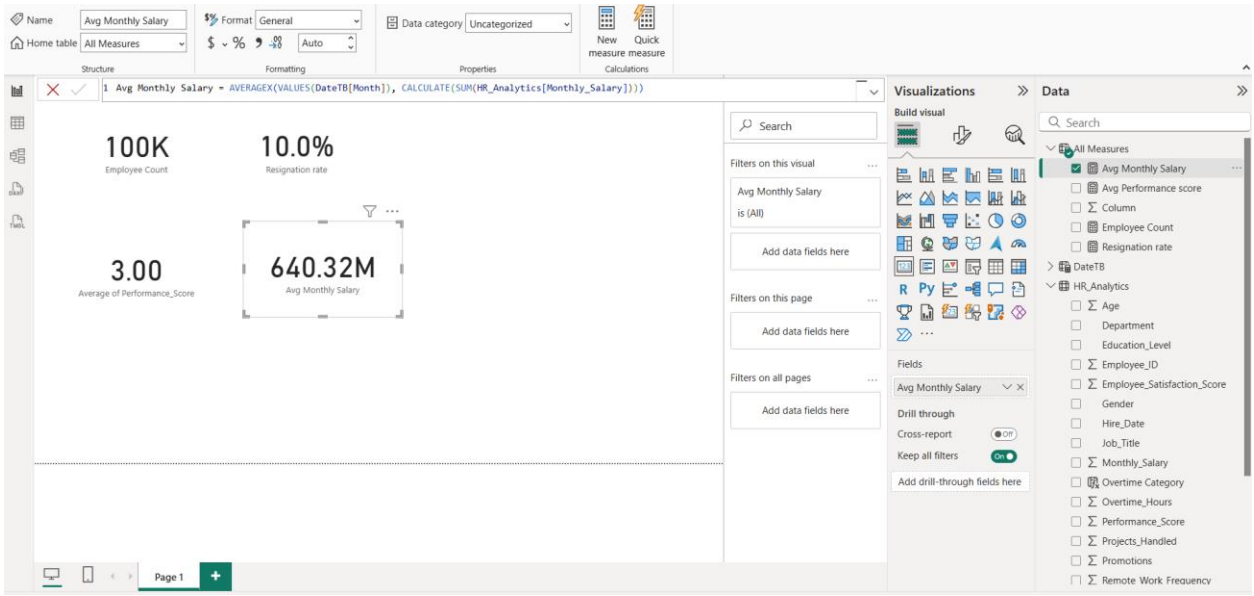
- Resignation Rate



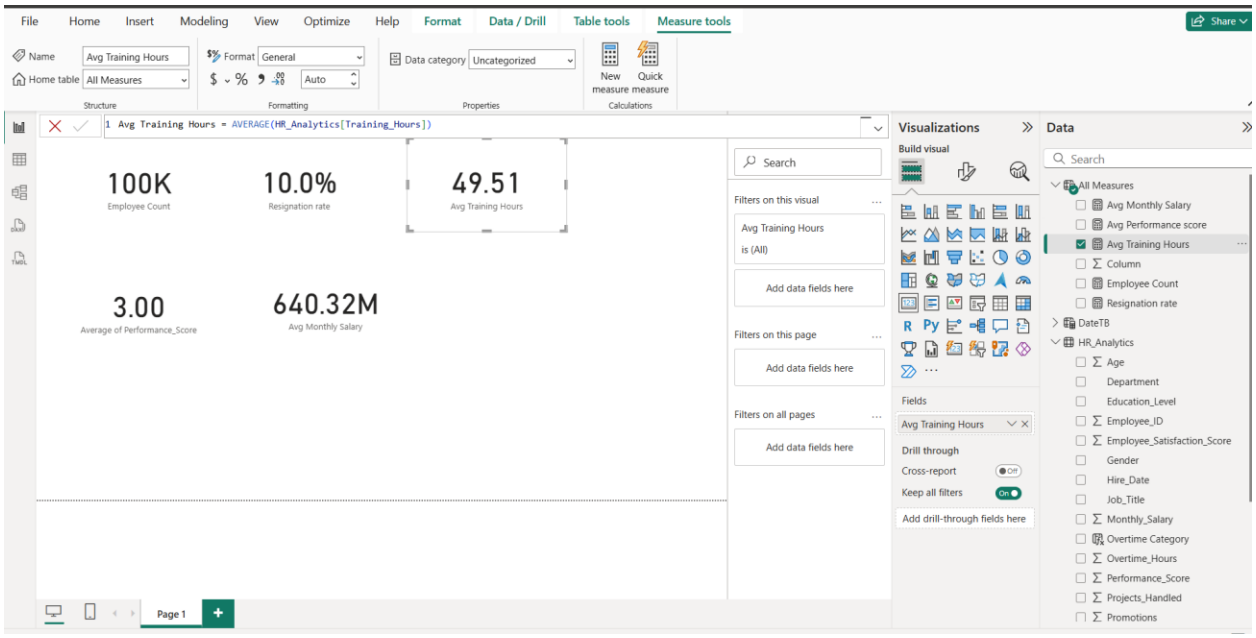
- Avg. Performance Score



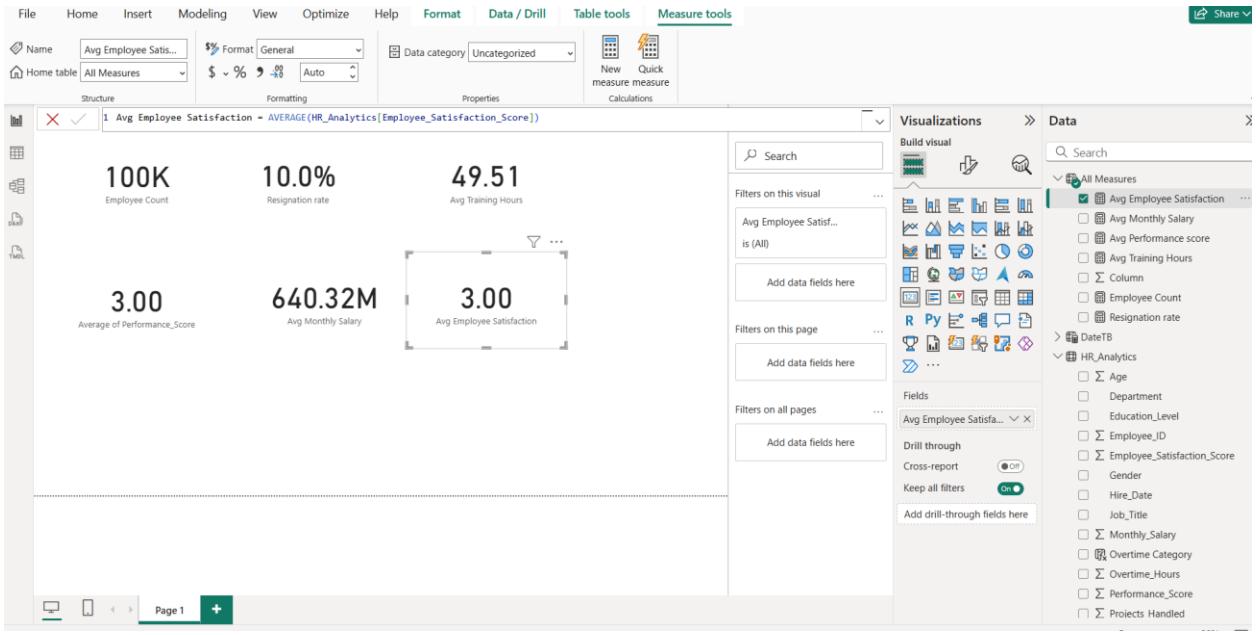
- Avg. Monthly Salary



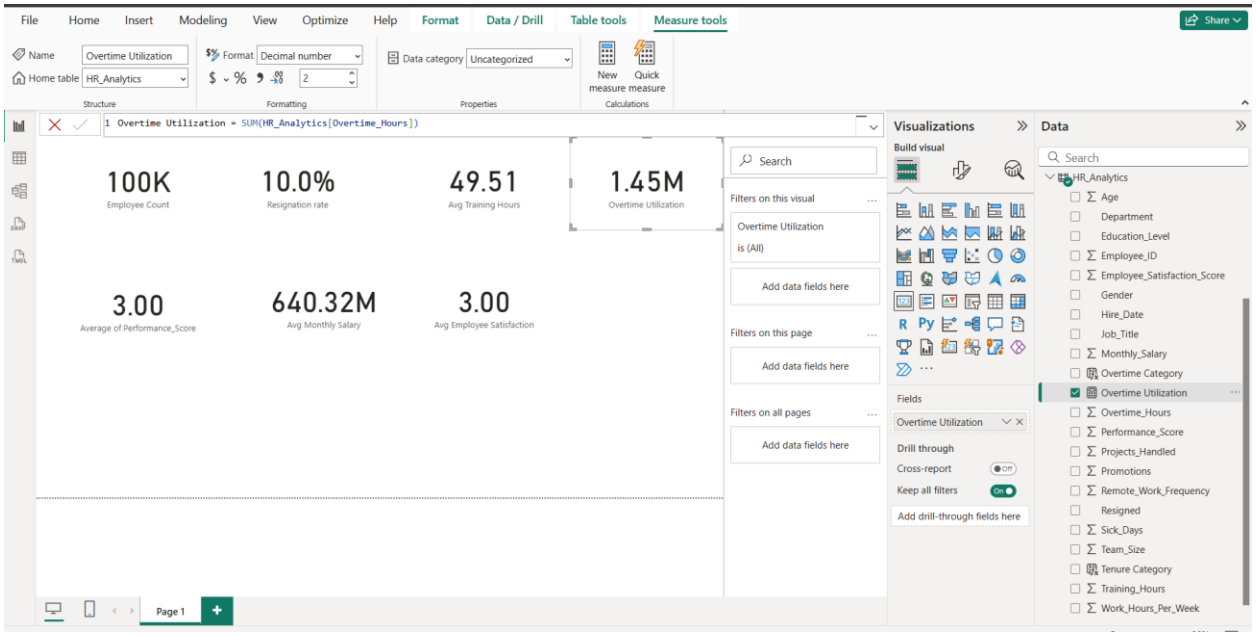
- Avg. Training Hours



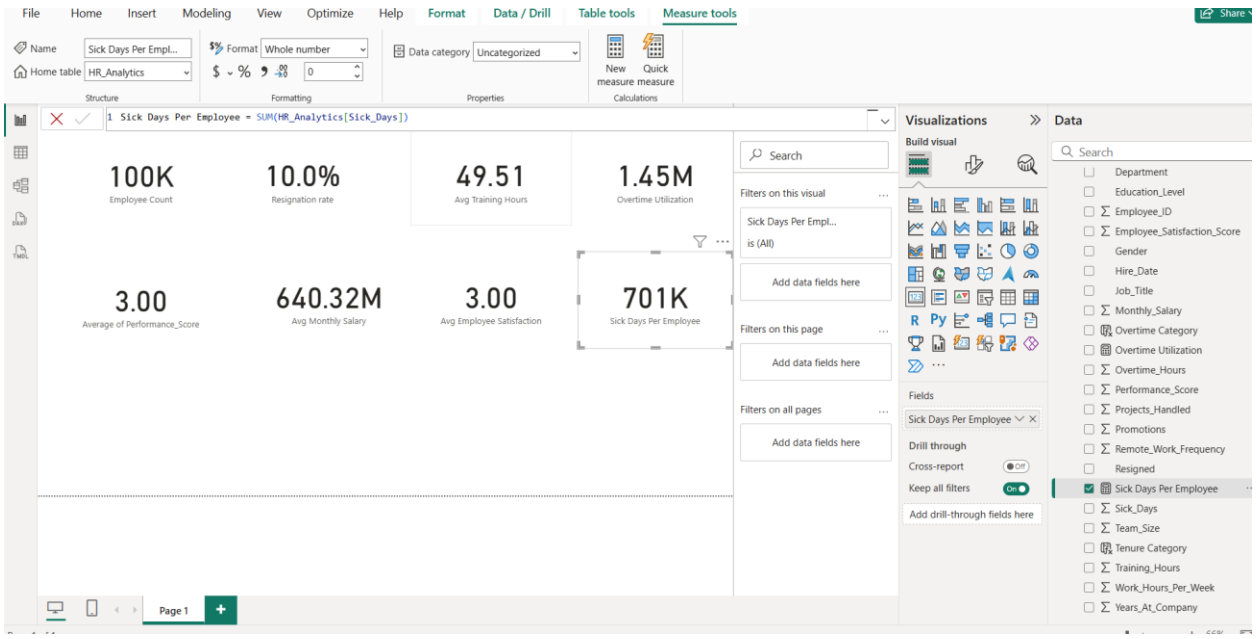
- Avg. Employee Satisfaction



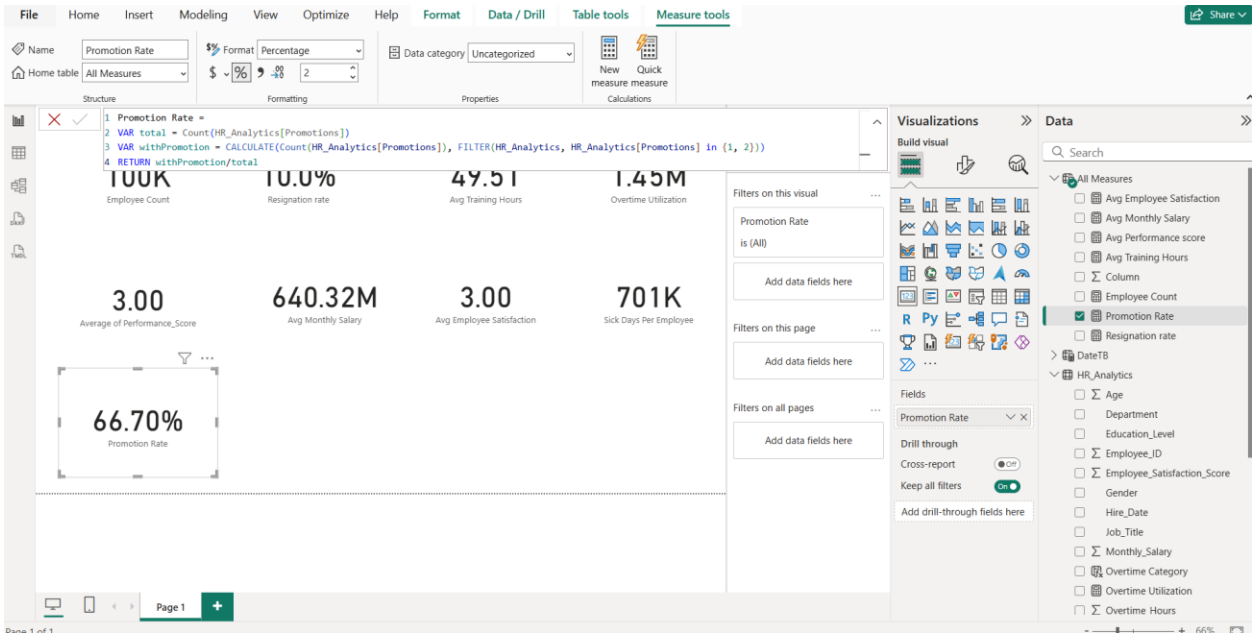
- Overtime Utilization



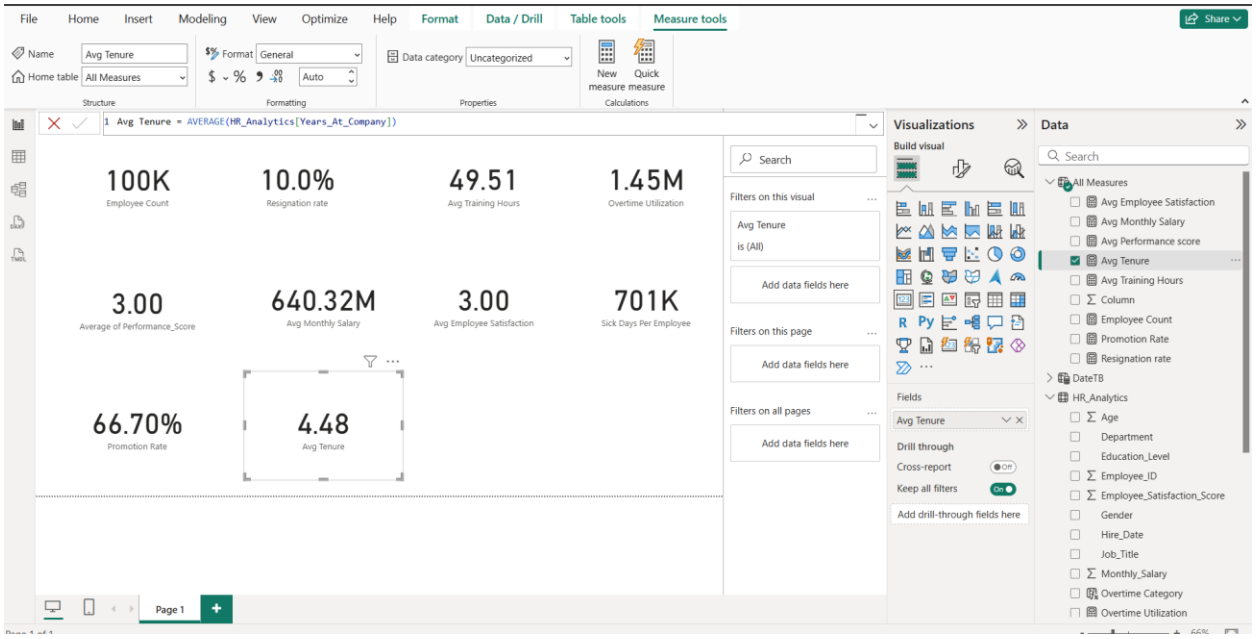
- Sick Days per Employee



- Promotion Rate



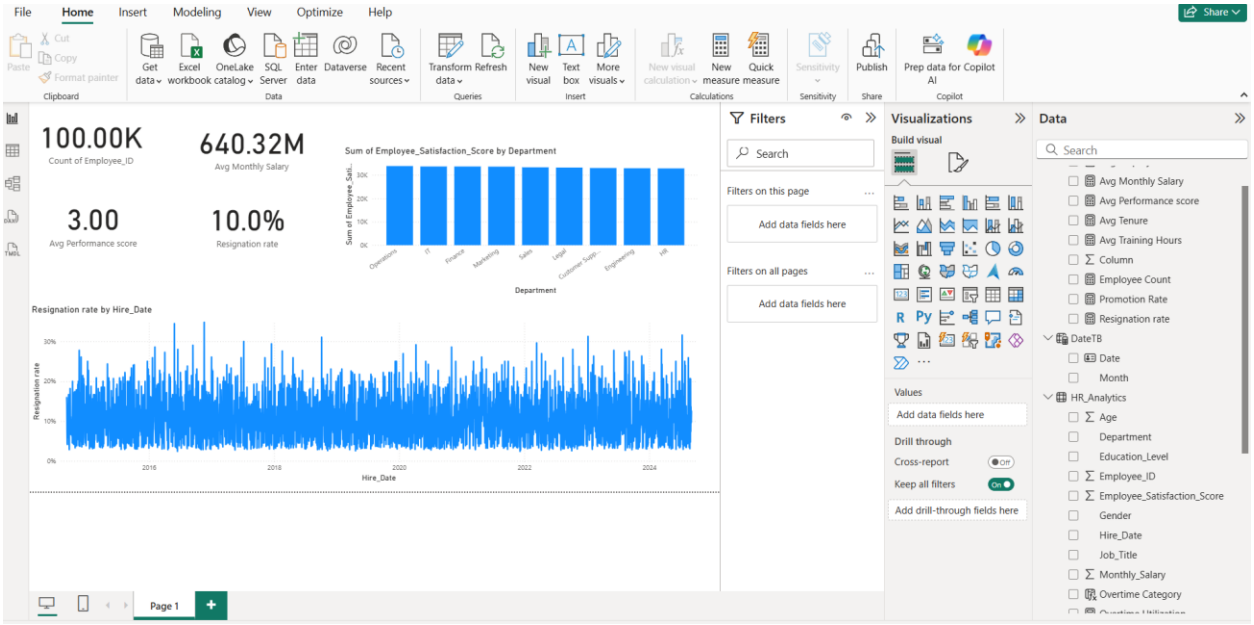
- Avg. Tenure (Years at Company)



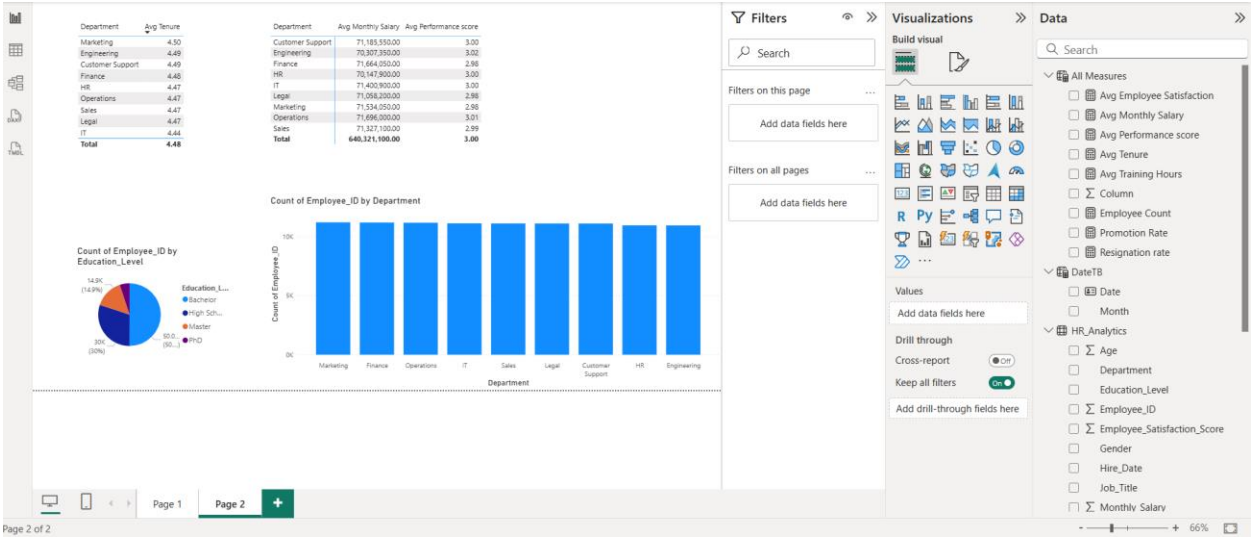
6. Report Pages and Visuals

- Page 1: Executive Summary
    - Card: Total Employees
    - Card: Resignation Rate
    - Card: Avg. Performance Score

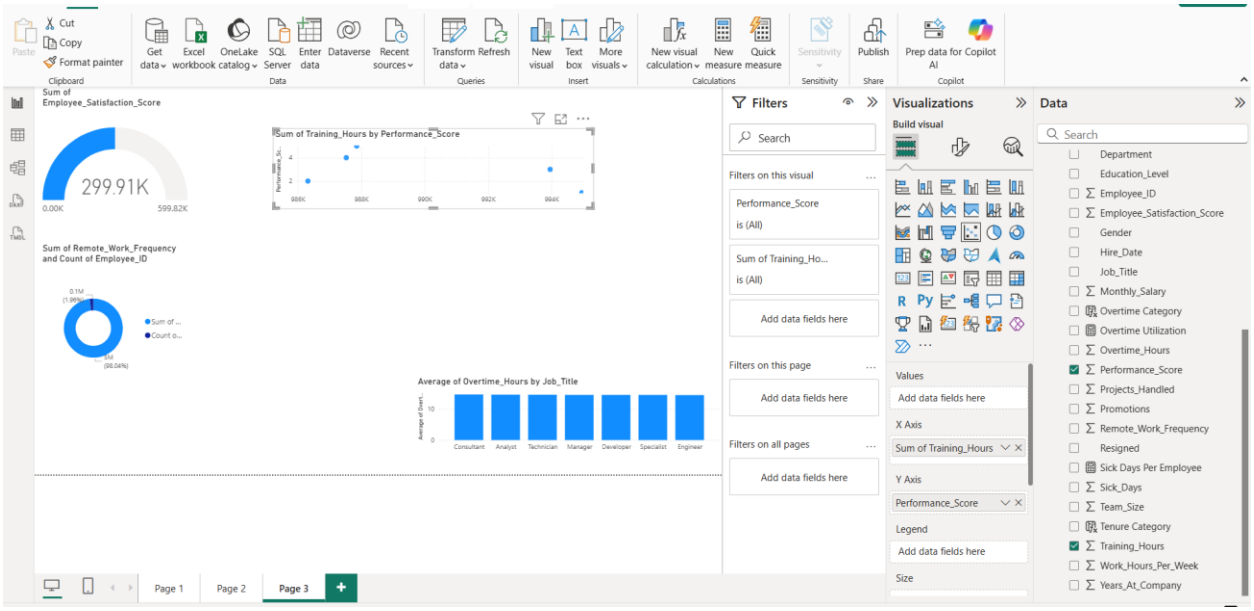
- Card: Avg. Monthly Salary
- Line Chart: Resignation Rate over Time
- Clustered Column Chart: Department-wise Satisfaction



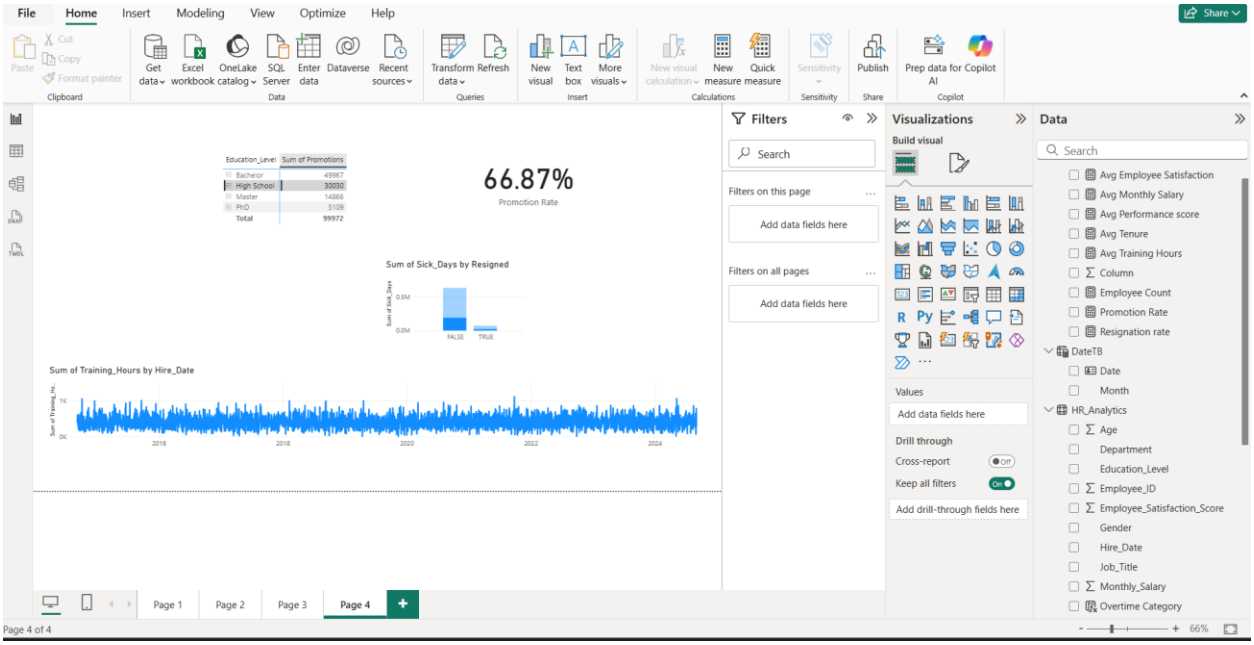
- Page 2: Department Insights
  - Bar Chart: Employees per Department
  - Heatmap: Avg. Salary vs Performance per Department
  - Pie Chart: Education Level Distribution
  - KPI: Avg. Tenure by Department



- Page 3: Employee Engagement
    - Gauge: Employee Satisfaction
    - Donut Chart: Remote Work Frequency
    - Clustered Column Chart: Avg. Overtime by Job Title
    - Scatter Plot: Training Hours vs Performance Score



- Page 4: Retention & Promotions
    - Matrix: Promotions by Department & Education Level
    - Bar Chart: Sick Days vs Resigned Employees
    - Line Chart: Training Trend over Years
    - Card: Promotion Rate



- Page 5: Filters and Slicers
    - Slicers: Department, Job Title, Education Level, Remote Work Frequency, Tenure Category, Resigned (Yes/No)