

HR Analytics Dashboard

Problem Statement & Business Requirements

Problem Statement

The organization lacked a unified, data-driven view of its workforce. Employee data was fragmented and not properly structured, making it difficult for leadership to answer critical questions such as:

- Which departments are overstaffed or understaffed?
- How employees are distributed across branches, positions, age groups, and genders.
- Which employee categories (New, Regular, VIP) consume the highest salary budgets.
- Hiring trends over the years and where workforce gaps exist.
- Which experience levels contribute most to salaries and overall talent distribution.

A centralized HR Analytics Dashboard was required to provide full visibility into staffing, salaries, demographics, and hiring trends — enabling data-driven workforce planning and better budget allocation.

Business Requirements

1. Workforce Distribution

- Total Employees: 947
- Departments: Compliance (165 highest), Logistics (35 lowest)
- Branches: Sharqia (209 highest), Alexandria (186 lowest)
- Positions: Employees (649), Managers (168), Supervisors (158)

2. Demographics & Experience

- Gender: 648 males, 321 females
- Age Groups: Highest 30–40 (495), Lowest 50–60 (71)
- Experience Levels: Senior (489), Mid-Level (478), Junior (5)

3. Employee Classification & Compensation

- Employee Types: New (650), Regular (198), VIP (125)
- Salary by Experience Level: Mid-Level highest (4,753,675)
- Salary by Department: Compliance (1,570,859 highest), Logistics (310,846 lowest)

4. Hiring Trends

- Peak hiring year: 2010 (58 hires)

5. Data Modeling Requirements

- Star Schema model with one Fact table (HR_DB)
- Dimensions: Department, Branch, Gender, Position, PayType, Age Group, Experience Level, Employee Type, Hiring Year
- Calculated Columns: Emp Type, Age Group, Experience Level

6. Dashboard Output

- KPIs: Total Employees, Total Salaries (\$9.31M), Gender Ratio, Salary Distribution, Employees by Department & Branch, Hiring Trends
- Interactive filters: Department, Branch, Employee Type

Summary

The HR Analytics Dashboard provides a complete 360° view of the workforce, highlights staffing gaps, reveals salary concentration, and supports strategic HR decision-making through accurate, structured data.