



# Recruitment Funnel & Hiring Performance Dashboard

A portfolio-ready analytics solution evaluating the complete recruitment funnel from application to joining for a mid-sized service organization.

# Project Overview: Evaluating Hiring Performance

## Core Focus

Analyze the complete recruitment funnel to evaluate hiring performance, recruiter efficiency, and source effectiveness.

## Technology Stack

Used SQL for data cleaning/transformation and Power BI for visualization to deliver actionable insights.

## Goal

Build a real-world, portfolio-ready analytics solution that mimics manual corporate reporting.



# Tools & Data Foundation

## Key Technologies

- Database: SQL Server
- Visualization: Power BI (Import Mode)
- Modeling: Star Schema
- Language: SQL + DAX

## Dataset Scope

7 CSV files simulating a recruitment system, containing 500 candidate records.



### SQL Server

Used for robust data cleaning and transformation.



### Power BI

Chosen for dynamic visualization and dashboard creation.



### Star Schema

Ensured efficient aggregation and accurate relationships.

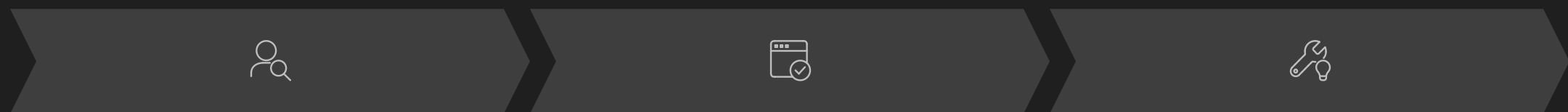
# Dataset Structure: 7 Key Tables

The project utilized 7 tables to capture the full recruitment lifecycle, forming the basis of the Star Schema model.

Table Name	Description	Key Columns
candidates	Basic details of candidates	Candidate\_ID, Applied\_Date
applications	Application and job info	Application\_ID, Recruiter\_ID, Source\_ID
interview\_stages	Candidate's progress records	Stage\_Name, Stage\_Date
offers	Offer details and outcomes	Offer\_ID, Offer\_Status, Offered\_Salary
recruiters	Recruiter profiles	Recruiter\_ID, Experience\_Years
hiring\_sources	Source of application	Source\_ID, Source\_Name

# Data Modeling: Establishing Relationships

A clean Star Schema was implemented using 1:M (One-to-Many) relationships with single direction filtering to ensure efficient aggregation and accurate data flow.



## Candidates

Linked to Applications, Interview Stages, and Offers.

## Applications

Linked to Recruiters, Departments, and Hiring Sources.

## Star Schema

Ensures accurate relationships across multiple fact tables.

- Example Relationship: candidates[Candidate\\_ID] → applications[Candidate\\_ID] (1:M)



# Key Business Questions Addressed

The dashboard was designed to answer critical questions about efficiency, performance, and bottlenecks in the hiring process.



## Source Performance

Which recruitment source performs the best (Candidates Joined by Source)?



## Time to Hire

Which job roles take the longest to hire (Average Time to Hire by Job Role)?



## Recruiter Impact

Which recruiter brings the most hired candidates (Offers Made and Accepted)?



## Drop-off Analysis

Where do most candidates drop off in the hiring funnel (Candidates by Stages)?

# Key Performance Indicators (KPIs) & Formulas

DAX measures were developed to calculate critical conversion ratios and time metrics, providing clear insights into hiring health.

74%

Offer Acceptance %

(Offers Accepted / Offers Made) × 100

83.3%

Offer to Join %

(Total Joined / Offers Made) × 100

29

Avg Time to Hire

Average days between application and offer date.

Total Offers Made, Offers Accepted, and Total Joined were calculated using simple COUNTROWS and FILTER functions in DAX.

# Dashboard Visuals: Performance Overview

Dashboard 1 provides a high-level view of the funnel and recruiter performance.

## Visual Elements

- KPI Cards: Offers Made, Accepted, Joined, and conversion percentages.
- Funnel Chart: Candidates by Stage (Applied → Joined).
- Bar Charts: Candidates by Job Role and Source Name.
- Clustered Column Chart: Offers vs. Accepted by Recruiter.



Slicers for Gender, Recruiter, Source, and Stage allow for dynamic filtering and deeper analysis.

# Dashboard Visuals: Time-to-Hire Analysis

Dashboard 2 focuses on efficiency metrics, particularly the time required to fill roles.



## Key Charts

- Line Chart: Average Time to Hire (Monthly Trend).
- Bar Chart: Avg Time to Hire by Job Role.
- Table: Recruiter-wise Avg Hiring Time and conversion counts.

## Key Metrics

Total Recruiters, Job Sources, and Average Hiring Days are highlighted via dedicated KPI cards.

# Key Insights and Project Outcome

## Effective Sources

Referral and Company Website are the most effective hiring sources.

## Bottlenecks

Most drop-offs occur during the Technical and HR interview stages.

## Hiring Health

Offer Acceptance Rate (74%) and Offer-to-Join Ratio (83.33%) indicate a healthy hiring process.

## Role Time

Marketing Associate and Software Engineer roles take longer to fill than Data Analyst positions.

This project successfully demonstrated end-to-end data modeling, SQL-based ETL, and storytelling through visually consistent data visualization.