



# 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

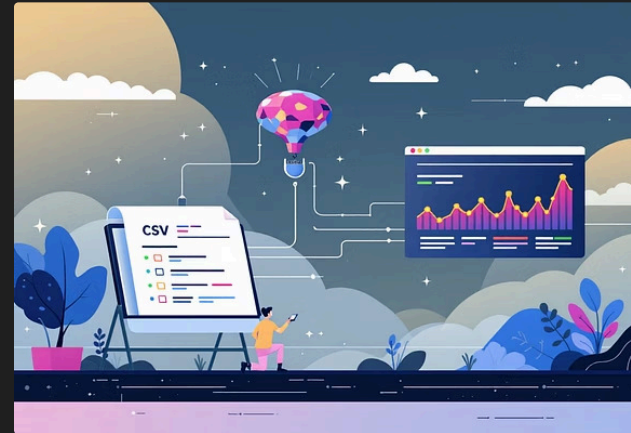
Analyze the complete recruitment funnel to evaluate hiring performance, recruiter efficiency, and source effectiveness.

## 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 %

$(\text{Offers Accepted} / \text{Offers Made}) \times 100$

83.3%

Offer to Join %

$(\text{Total Joined} / \text{Offers Made}) \times 100$

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.