HR ANALYTICS: PREDICTING EMPLOYEE PROMOTIONS

DATA-DRIVEN INSIGHTS FOR FAIR AND EFFECTIVE PROMOTION DECISIONS

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PROJECT OVERVIEW

Objective: Drive employee promotion prediction using machine learning and increase the efficiency of HR in a multinational corporation

Problem: Traditional promotion processes are manual and slow, based on delayed judgments.

Goal: Predict employees likely to be promoted, allowing HR teams to make data-driven, timely decisions.

Stakeholders : HR, Department Heads, Executive Leadership, Data Science/IT Teams.

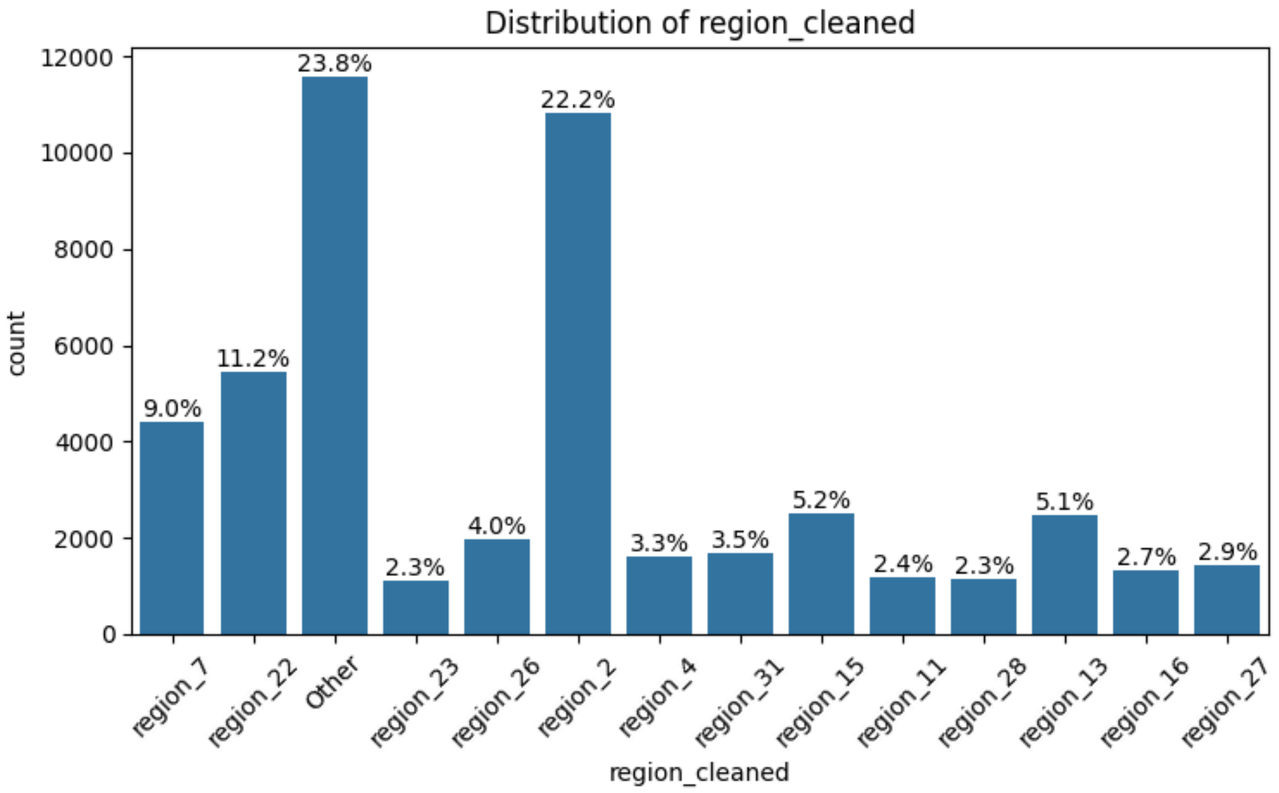
DATA CLEANING

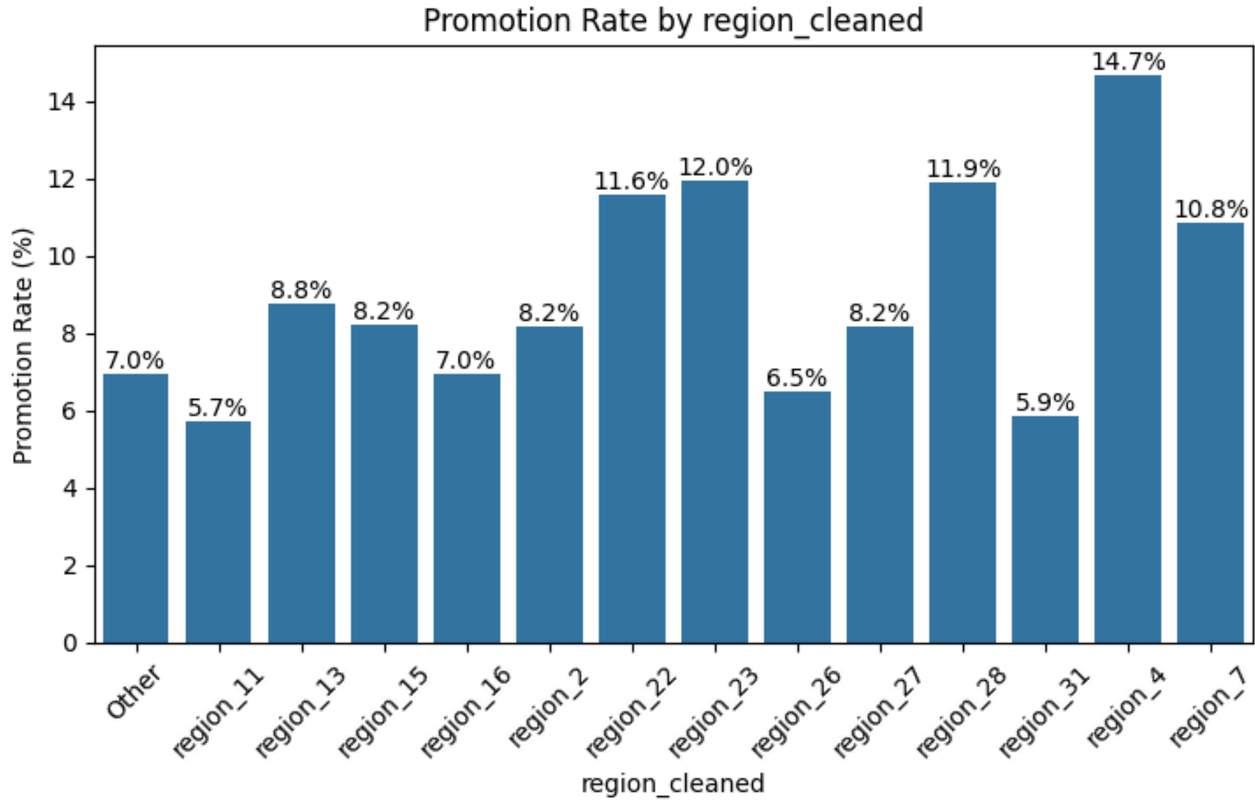
Dataset Overview

- 54,808 records in the training set, 14 features (e.g., department, age, length_of_service).
- Demographic and performance-based data.

Key Features

department, age, previous_year_rating, avg_training_score, is_promoted.





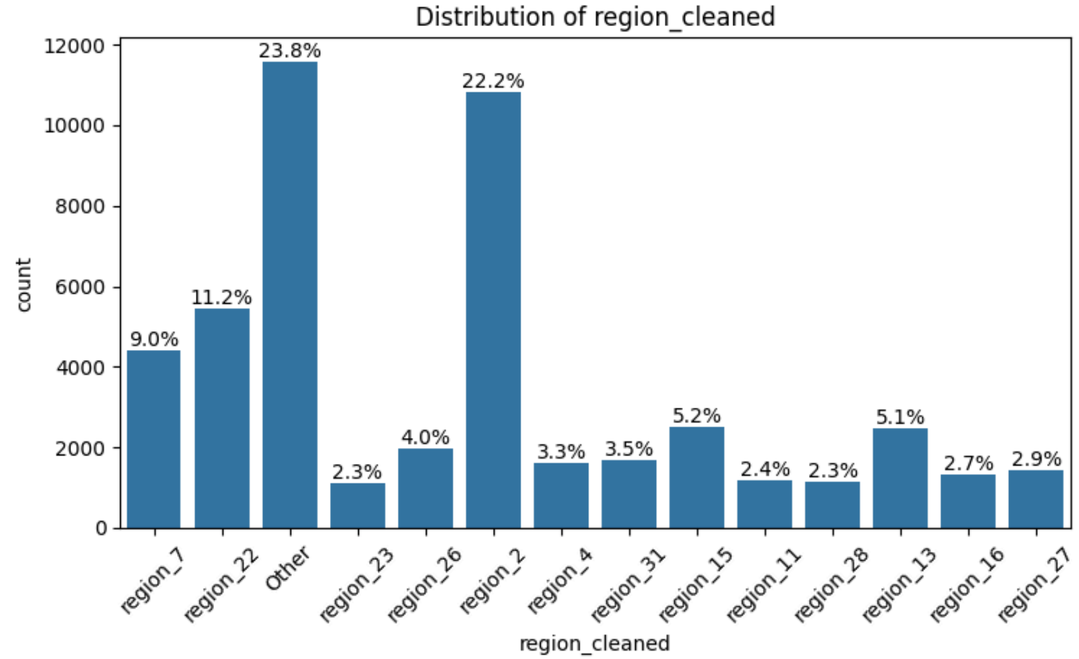
DATA CLEANING & PREPROCESSING

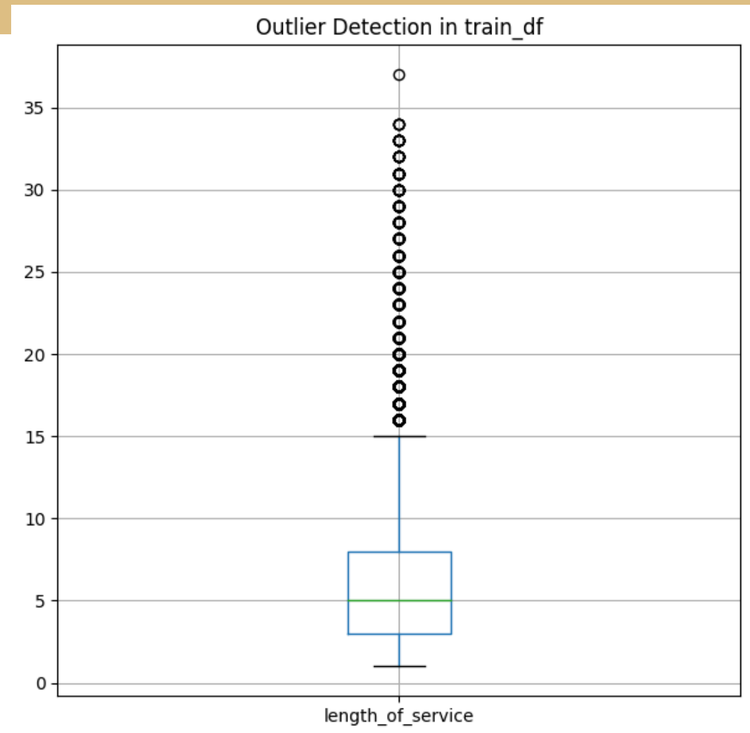
Data Quality

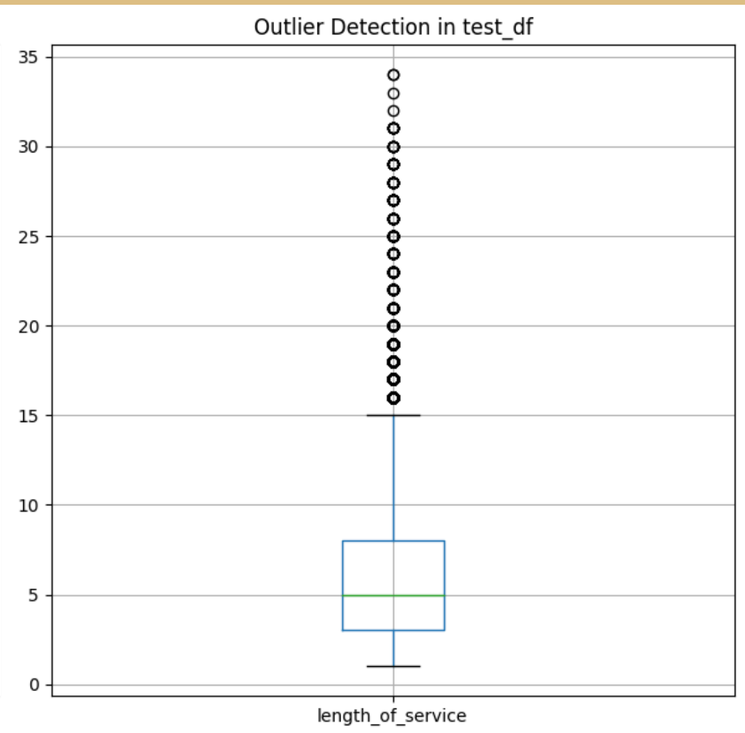
- Dataset Size: 54,808 records with 14 features.
- Missing Values: education and previous_year_rating columns with missing data were removed.

Key Features

department, age, previous_year_rating, avg_training_score, is_promoted.







THANK YOU