Tourism in Saudi

Introduction

Saudi Arabia is rapidly emerging as a leading global tourist destination under Vision 2030. This project investigates the key factors that drive tourism using a data-driven approach, aiming to provide actionable insights to support and enhance the country's tourism strategy.

Data Collection

Source	Type of Data	Collection Method
Ministry of Tourism	Tourist numbers, spending, demographics	Public open data portal
TripAdvisor	Reviews and hotel ratings	Web scraping via Apify
Booking.com	Hotel reviews and details	Web scraping via Apify
Survey	Tourist experiences and preferences	Google Forms (Feb 4–6, 2025)
Twitter/X	Real-time sentiment and event reactions	API with Bearer Token

Objectives

- What are the most popular tourist destinations in Saudi Arabia?
- Which seasons attract the highest number of visitors, and why?
- How do spending patterns differ between domestic and international tourists?
- What factors contribute most to tourist satisfaction or dissatisfaction?
- How have large-scale projects like Riyadh Season and NEOM influenced visitor trends?
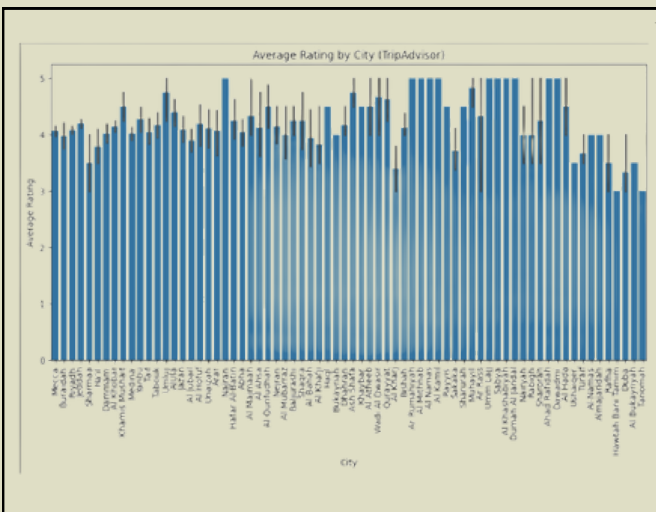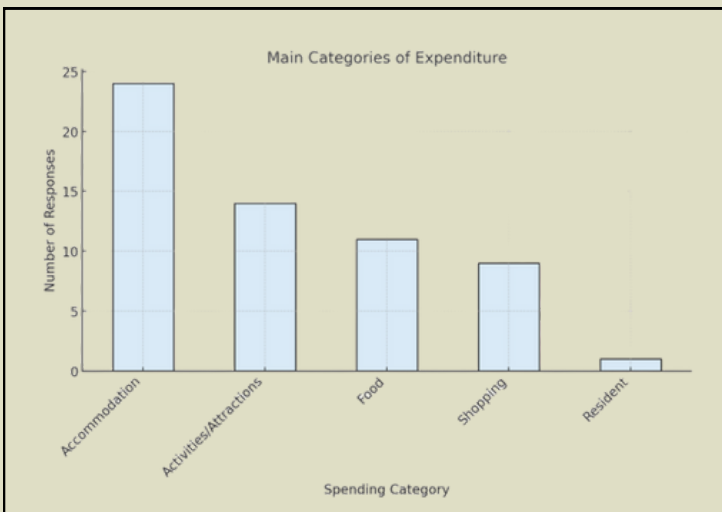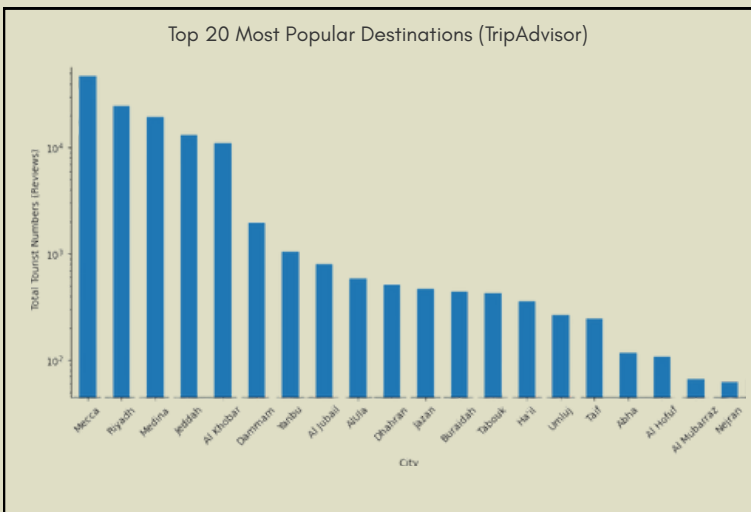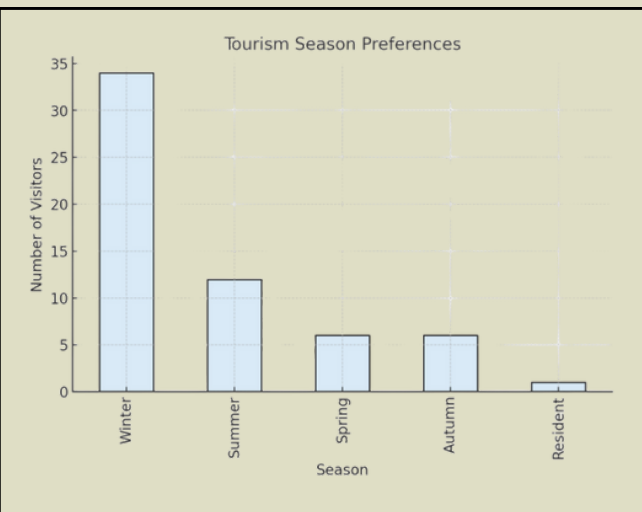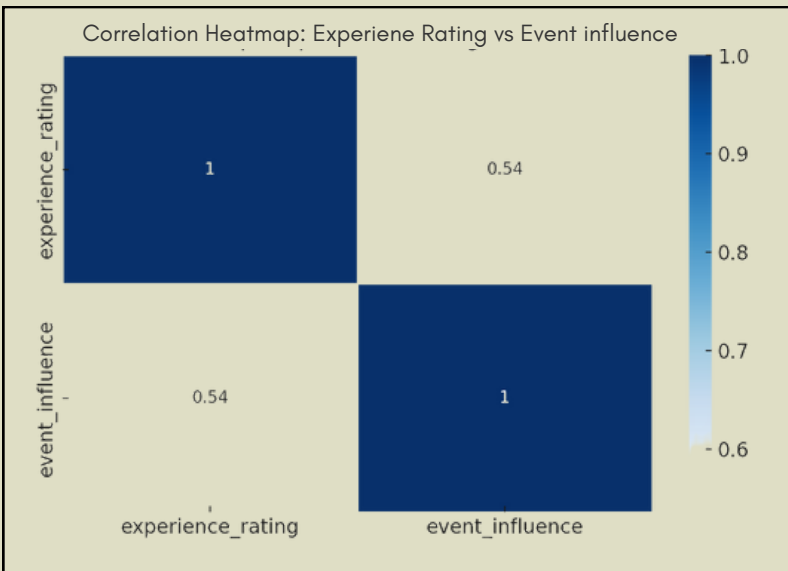
Data Analysis

Top Destinations: Riyadh attracted about 35% of tourists. (Bar Chart: Review Counts per Province)

Seasonal Trends: Tourism peaked in January, based on Ministry of Tourism data.

Tourist Spending: Around 40% of spending went to accommodation. (Bar Chart: Spending Categories)

Experience Ratings: 78% of tourists rated their experience 4 or 5 stars. (Histogram: Experience Ratings)

Impact of Events: Attending major events, like Riyadh Season, raised satisfaction to an average of 4.3/5. (Bar Chart: Event Attendance Impact)

Correlation Heatmap: Experiene Rating vs Event influence

Tourism Season Preferences

Top 20 Most Popular Destinations (TripAdvisor)

Main Categories of Expenditure

Average Rating by City (TripAdvisor)

Models & Findings

Clustering: KMeans, Agglomerative
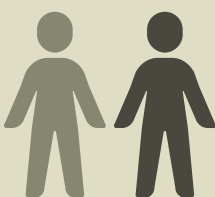**Classification**: Logistic Regression, SVM, Random Forest

SVM model

80% accuracy predicting tourist satisfaction

Riyadh Season ↓ boosted satisfaction scores

Spending behavior differed between domestic and international tourists.

Conclusion

The study shows that cultural events and major projects drive tourism growth.

Tourists are highly influenced by seasonal events, and destinations like Riyadh and Jeddah lead in visitor numbers.

These insights can help policymakers plan future tourism strategies more effectively.