

INTRODUCTION

Amidst technological advancements, the tourism industry is undergoing significant transformations driven by the collection and analysis of data. Data mining, particularly crucial for businesses within the tourism sector, provides valuable insights into customer behavior and preferences, enabling informed decision-making and effective service enhancements.

This essay seeks to explore and analyze data sourced from an online booking platform, with a specific focus on identifying trends in bookings and the primary factors influencing consumer decisions during hotel searches and reservations. To achieve this objective, I will employ preprocessed and normalized datasets, undertake comprehensive data preprocessing, perform detailed analysis, and utilize analytical models for optimal prediction outcomes.

By delving into the intricacies of this data, the essay will propose strategies aimed at elevating the customer experience and improving operational efficiency for tourism companies. The research not only aims to deepen our understanding of customer behavior but also strives to contribute to the establishment of a foundation for intelligent recommendation systems and automated decision-making processes within the tourism industry. This contribution seeks to bolster the industry's sustainable success in the digital age.