

Booking.com Analytics: Uncovering Insights

EXPERIENCES OF EVERY KIND, FOR EVERYONE.



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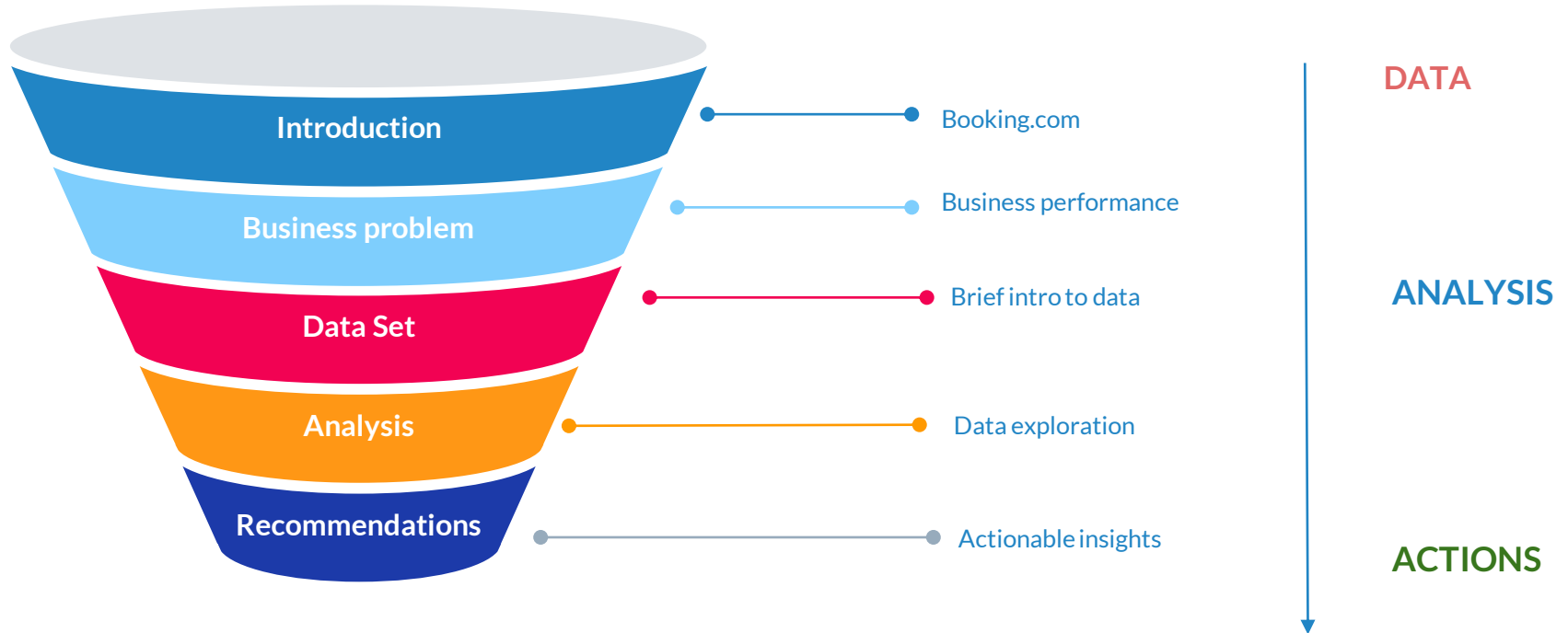
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Booking.com

Agenda



1. Introduction to topic:

Booking.com is a metasearch engine for booking travel accommodation. The website is owned by Booking Holdings in the United States.



Headquarters
in [Amsterdam](#)



\$17.09 B
Revenues in 2022



10 to 15%
commission per
reservation from
service providers

Business problem



- Optimize its platform performance and enhance the traveler experience.
- Identifying High-valued hotels with affordable prices and create a recommendations systems.
- To analyze the data and find out behavioral patterns in customer reviews
- Identify underperforming hotels and factors affecting their performance

Strategic Analysis Areas



- **Customer Reviews Clustering:** Group hotels based on the types of reviews they receive.
- **Affordable Accommodation Options :** Create a dashboard that has actionable insights on most affordable hotel with hotel ratings and room score of more than 8.
- **Sentiment Analysis:** Evaluate the impact of hotel amenities by doing sentiment analysis of user reviews.

Data Sets



- Two data sets
 - Booking.com &
 - Tripadvisor

Columns in data set:

<i>hotel_name</i>	
<i>location</i>	<i>Thailand</i>
<i>hotel_rating</i>	<i>From 1 to 10</i>
<i>review_score</i>	<i>Exceptional to fair</i>
<i>no_of_reviews</i>	<i>total review for each hotel</i>
<i>room_score</i>	<i>1 to 10</i>
<i>room_type</i>	<i>one bedroom to deluxe and suits</i>
<i>bed_type</i>	<i>Double bed, queen, king size etc</i>
<i>room_price</i>	<i>(USD)</i>
<i>Room reviews</i>	<i>Detailed reviews for each property</i>

Disclaimer or Constraints



Influence of Guest-Staff Relationships:

- Factors like relationships between guests and the hotel staff/owners/managers can affect the sentiments and reviews of customers

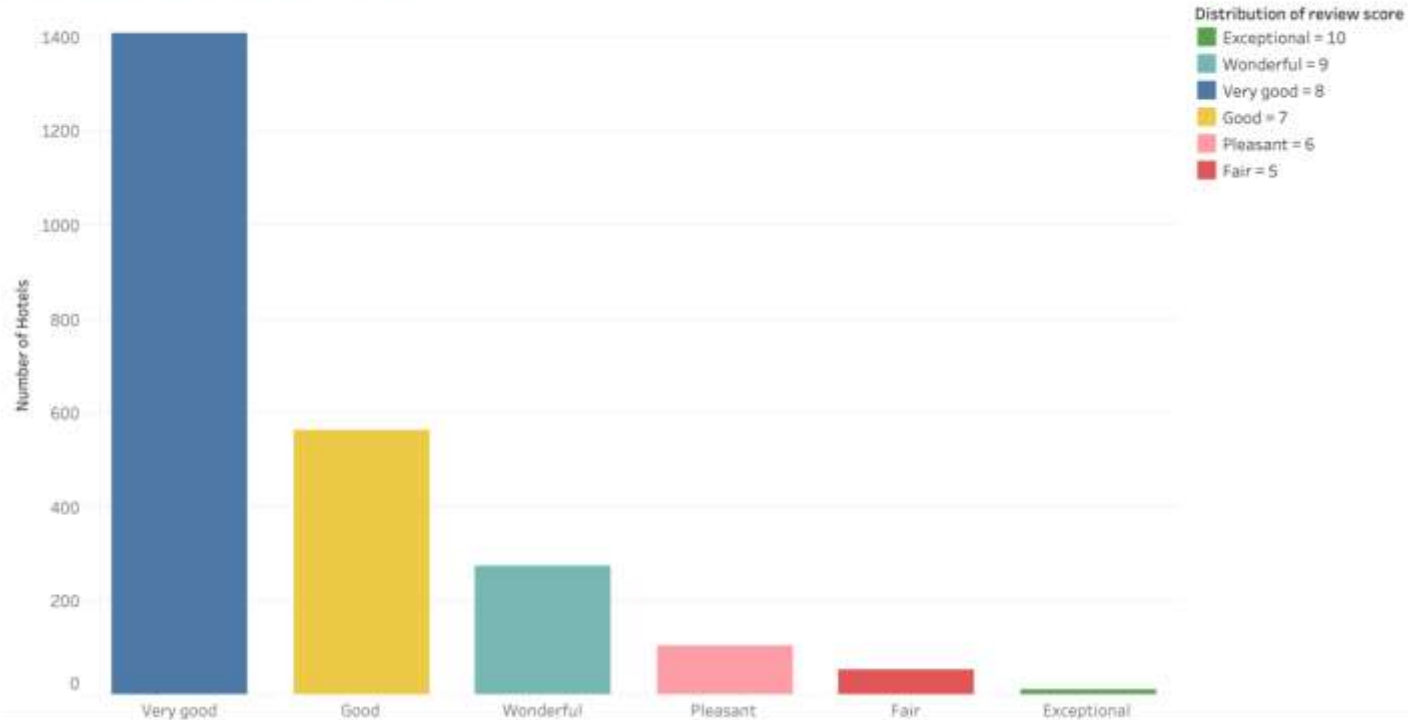
Diversity of Customer Origins:

- Distinct cultural expectations and experiences can lead to differing perspectives in feedback. Therefore, reviews from local and international customers may exhibit variations.

Customer Reviews Clustering

58 % of hotels have hotel ratings above 8

30% have hotel ratings below 7



High-valued hotels with affordable prices

- Recommendation system that helps travelers find affordable accommodations that meet their preferences while maintaining a good level of quality can be used by booking.com on their site.
- Booking.com can increase revenues from these affordable hotels with high ratings.



Sentiment Analysis



Analyzing behavioral patterns of customers reviews

- Sentiment Analysis for Quality Assurance
- Customer Satisfaction Improvement Rate
- Success Factor Identification Rate

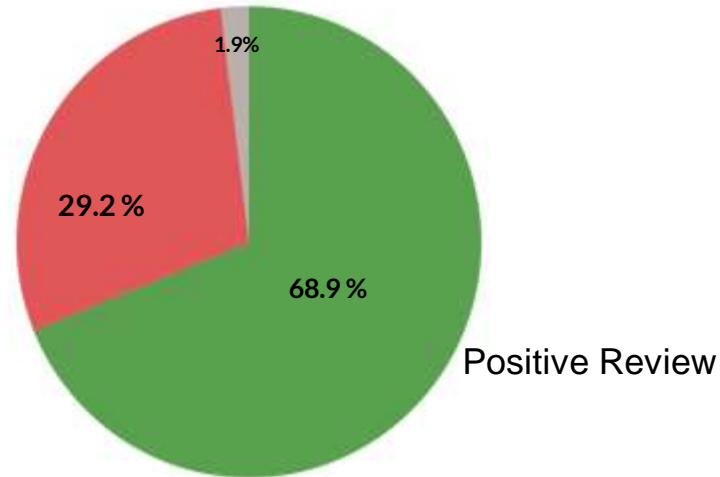
Sentiment Analysis for Quality Assurance

- **Objective:** Conduct sentiment analysis to identify accommodations with positive and negative reviews.
- Aims to aid service providers in making informed decisions about their services.

69% of the customer reviews are positive and around 30% are negative



Negative Reviews



Customer satisfaction improvement

Customer Satisfaction Improvement Rate:

- **Objective:** Boost customer satisfaction by reducing negative reviews.
- Achieved through thorough analysis of customer feedback.
- Identifying common issues in accommodations for quality enhancement.

Key Services essential for Hospitality Industry

1. Accommodation

Providing comfortable and well-maintained hotel rooms, suites, or vacation rentals.

1. Hospitality - Customer Service and Guest Relations

Building positive relationships with guests to enhance their overall experience.

1. Dining & Food

Offering dining experiences that range from fine dining to casual and fast-casual options.



Reviews Categorization

Accomodation

pool, worst,
disappointing, room,
kitchen, toilet,
uncomfortable

Hospitality

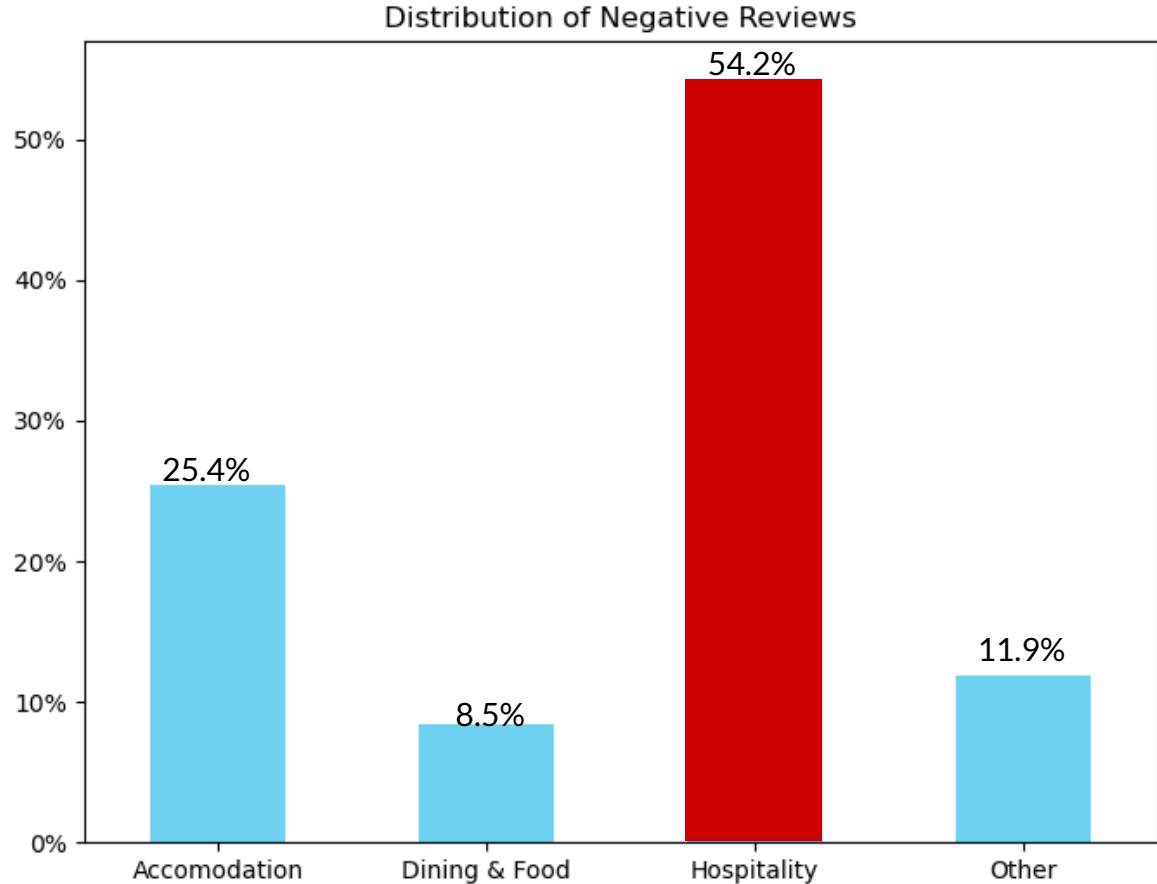
service,staff, late,
checkout, checkin,
housekeeper, bad,
horrible, negative, cheap,
ugly

Dining & food

food, breakfast,
restaurant, cafeteria,
menu, quality, strange,
resort

Factors affecting hotels with Negative Reviews

- Reviewers mentioned more negative words regarding hospitality service
- Keywords such as service, staff, late, checkout, checkin, negative, cheap,
- Service providers should focus more on improving their hospitality services



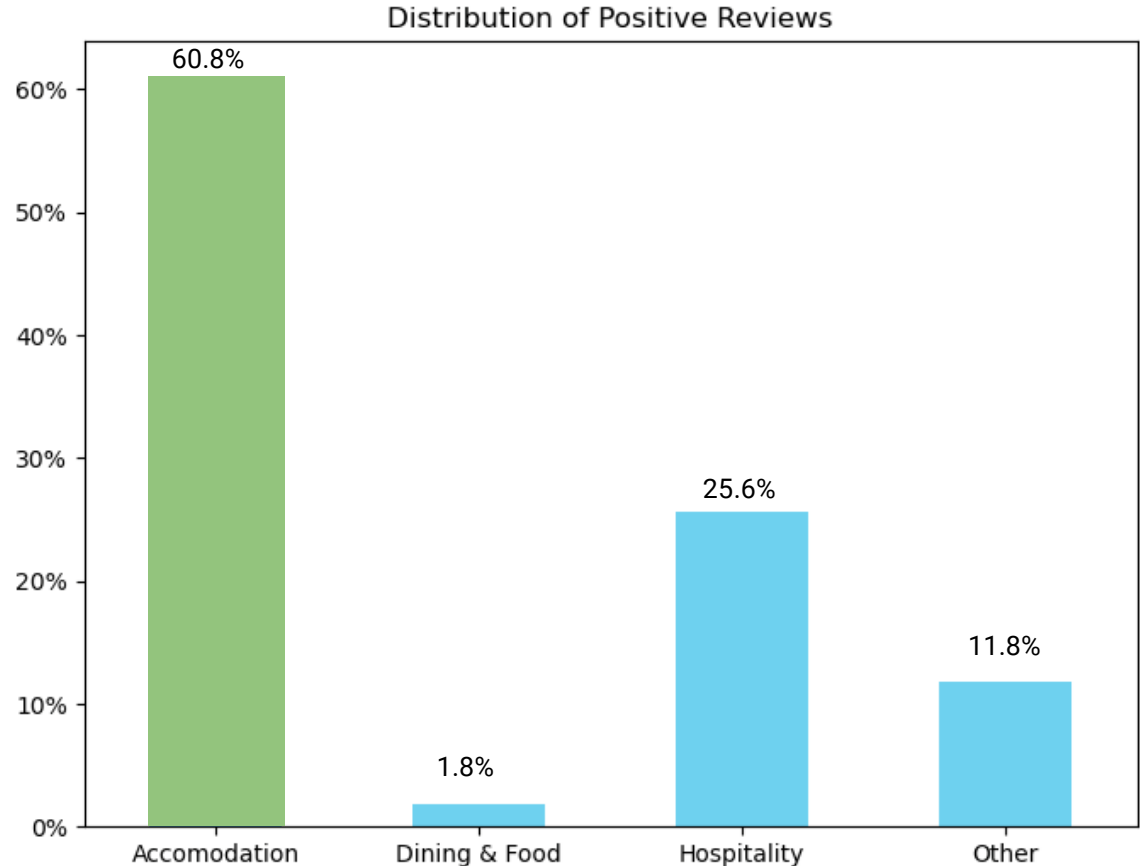
Success Factor Identification Rate

Success Factor Identification Rate

- Objective: Identify critical success factors that contribute to its ongoing success in the travel industry.
- Determine what customers appreciate and how to improve services.
- Maintain leadership in the travel industry through continuous improvement and data-driven insights.

Factors Driving Success: High-Performing Hotels

- Reviewers mentioned more words regarding hospitality service
- Keywords such as clean, excellent rooms, great kitchen are mentioned under accomodation services.



Recommendations

- Implement a High-Value Hotel Section- Feature these hotels prominently to attract budget-conscious travelers.
- Booking.com can increase revenues from affordable hotels with high ratings.
- Booking.com should recommend its service providers where the reviews are negative to focus more on improving their hospitality services
- Focus on giving more flexibility in check in and checkout time.
- Loyalty programs by offering discounts e.g flight discounts, cab rentals.

Technologies/ Tools



PostgreSQL

NATURAL
LANGUAGE
PROCESSING
USING
NLTK



PYTHON



Thank you for listening