Predicting Hotel Booking Cancellation

- Elnaz Pouranbarani
- Saurabh Patel
- Mahtab Amiri
- Snigdha Kundu
- Nikhil Mahadeshwar

Hotel Booking Cancellation

We all as a team decided to work on a real life hotel booking dataset so that we can help the hotel business to manage their business and that can eventually help them to increase the revenue.

Cancellation Study

Customer accustomed to free cancellation policy

Operational problems

Cancellation Rate

Reviews influences Travel spending

Non accurate forecast

Increase in online reputation score linked to increase in occupancy and revenue
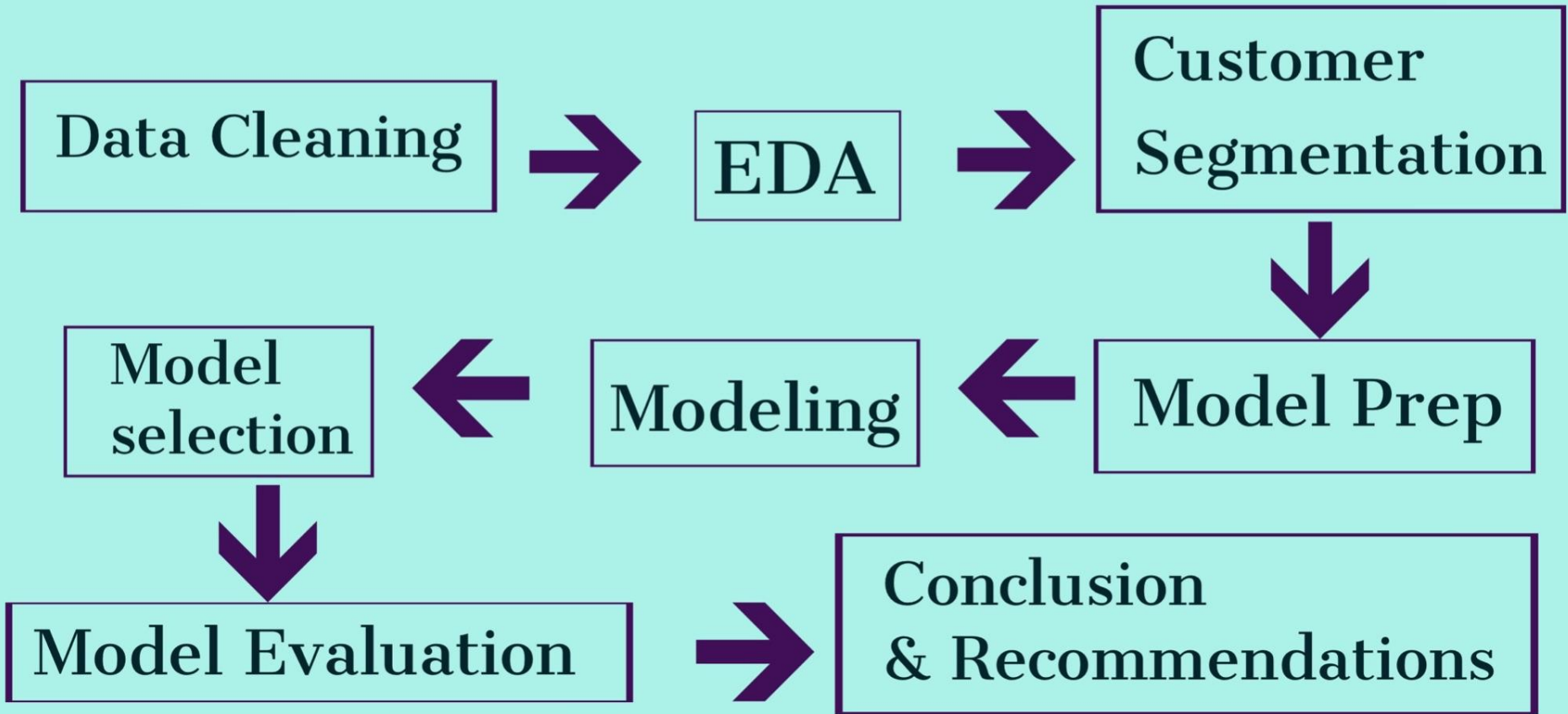
THE ANSWER

To find the negative effects of cancellations, hotel needs to identify which bookings are likely to get cancelled.

We have used a real life hotel booking dataset in order to get insights about the customers. We till then build a machine learning model to predict wether or not a booking will be cancelled with best accuracy possible.

THE ANSWER

This model will help hotel to predict a new booking will be cancelled or not, increase the revenue and effectively manage their business.

Workflow

| Data Cleaning | → | EDA | → | Customer Segmentation |

| Model selection | ← | Modeling | ← | Model Prep |

| Model Evaluation | → | Conclusion & Recommendations |

Machine Learning Model

Logistic Regression

Machine Learning Model

Ensemble Classifier

Machine Learning Model

Random Forest

Result of Analysis

Recommendations for future analysis