



SMARTER DECISIONS, **DELIVERED.**

## Case Study

### Optimizing Hotel Room Pricing for Revenue Maximization

30 July 2024

---

## Case Study: Optimizing Hotel Room Pricing for Revenue Maximization

As part of our hiring process, you are requested to prepare a PowerPoint presentation for the business case below. Note that the dataset provided is a sample and may need to be modified or expanded to better suit the needs of the case study. The case aims to assess the solution development process. When in doubt, feel free to make assumptions based on general business considerations.

### Business Context

- Azure Hotels is a hospitality company with a chain of 50 hotels across 20 cities in the United States. They offer a range of rooms, from budget-friendly options to luxury suites.
- Azure Hotels has a dynamic pricing strategy, where room prices are adjusted based on demand, competition, and other market factors. However, they want to optimize their pricing strategy to maximize revenue and profitability.
- The company has collected data on room bookings, cancellations, and revenue for the past two years. They also have data on competitor pricing, seasonal demand, and other market trends.
- Your task is to analyze the data and develop a pricing strategy that takes into account customer segmentation, demand forecasting, and competitor pricing.
- The goal is to recommend a pricing strategy that maximizes revenue and profitability for Azure Hotels.

### Dataset

The dataset will be shared with you separately over the email.

### Analysis Requirements

Your analysis should include the following steps:

- Customer Segment Analysis: Identify different customer segments based on their booking behaviour, demographics, and other relevant factors.
- Pricing Drivers Identification: Analyze the factors that drive room pricing, including demand, and other factors which might deem fit.
- Pricing Strategy Development: Develop a pricing strategy that takes into account customer segmentation and demand forecasting.
- Impact Quantification: Quantify the expected impact of the recommended pricing strategy on revenue and profitability.

---

## Presentation Requirements

Your presentation should include the following:

- Executive summary of the analysis and recommendations
- Overall analytical approach/ architecture
- Customer segment analysis and profiling
- Pricing drivers identification and analysis
- Recommended pricing strategy and expected impact
- Conclusion and next steps

Share the Python or R scripts/ Jupyter notebook used for the analysis along with the presentation.

## Audience

The audience for the presentation is the Director of Revenue Management and the Director of Marketing, along with their team members. The purpose of the meeting is to review the analysis and recommendations in detail and discuss implementation plans.