

INFOSYS

HOTEL REVAI

AI driven Revenue Analysis for Hotel





INTRODUCTION

The hospitality industry faces challenges in managing revenue because of changing customer demand and market trends. To solve this, hotels are now using AI-driven solutions that can predict demand, adjust prices dynamically, and improve both profitability and guest satisfaction.



Revenue Challenges

The hotel industry faces many challenges in managing revenue



Traditional methods

Manual forecasting and fixed pricing limit flexibility.



Role of AI

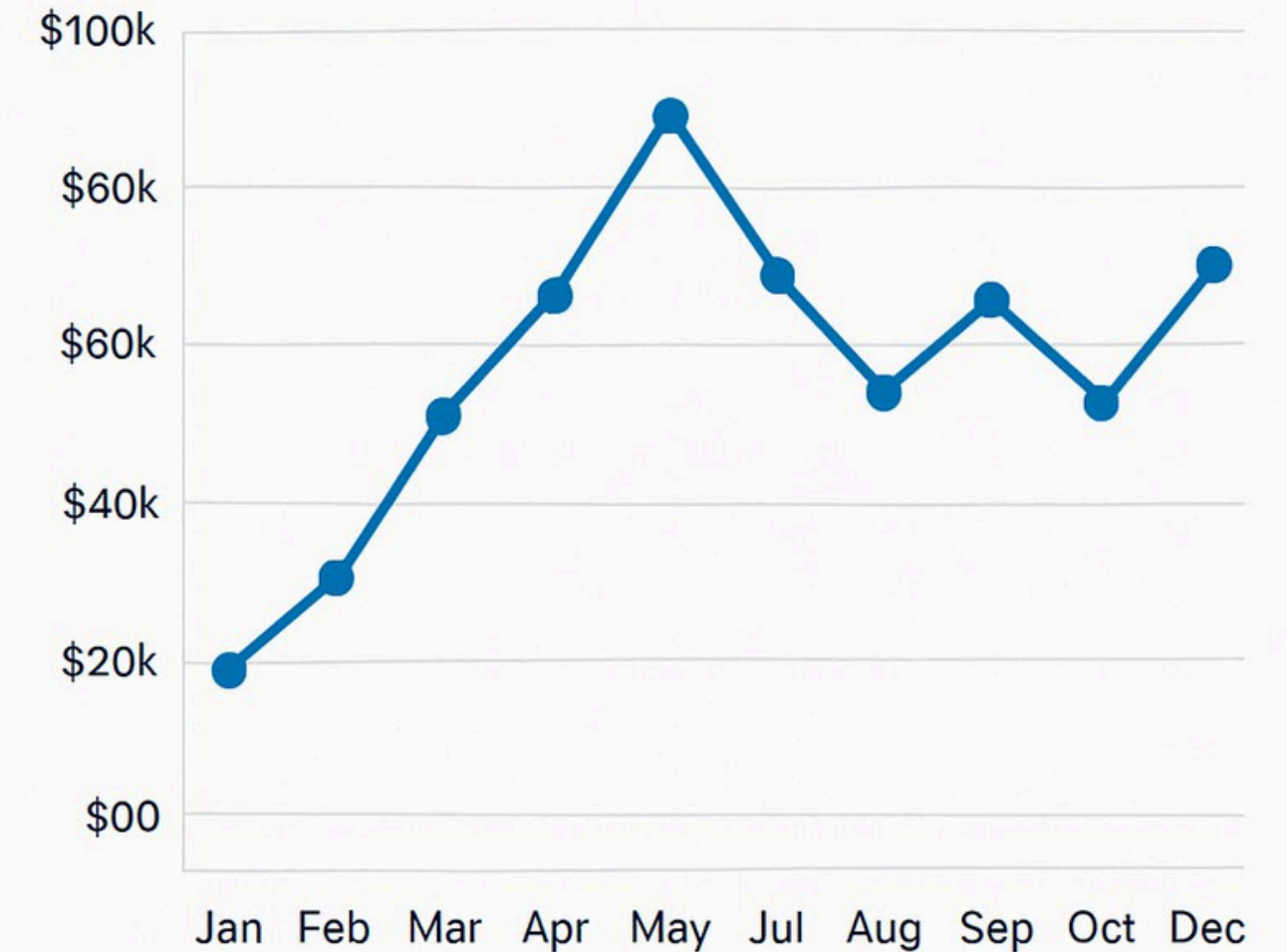
AI helps hotels make smarter and faster decisions.

Problem Statement

THE MAIN OBJECTIVE OF OUR PROJECT IS TO ANALYZE HOTEL REVENUE, BOOKING TRENDS, AND CUSTOMER BEHAVIOR USING DATA VISUALIZATION TOOLS LIKE POWER BI AND EXCEL.

Hotels face challenges in managing large amounts of booking and revenue data efficiently. Manual analysis limits their ability to identify key trends and predict demand accurately. HotelRevAI provides a data-driven solution that delivers clear insights for smarter decisions and improved profitability.

Hotel Revenue



Better Solution



AI-powered revenue analysis platform

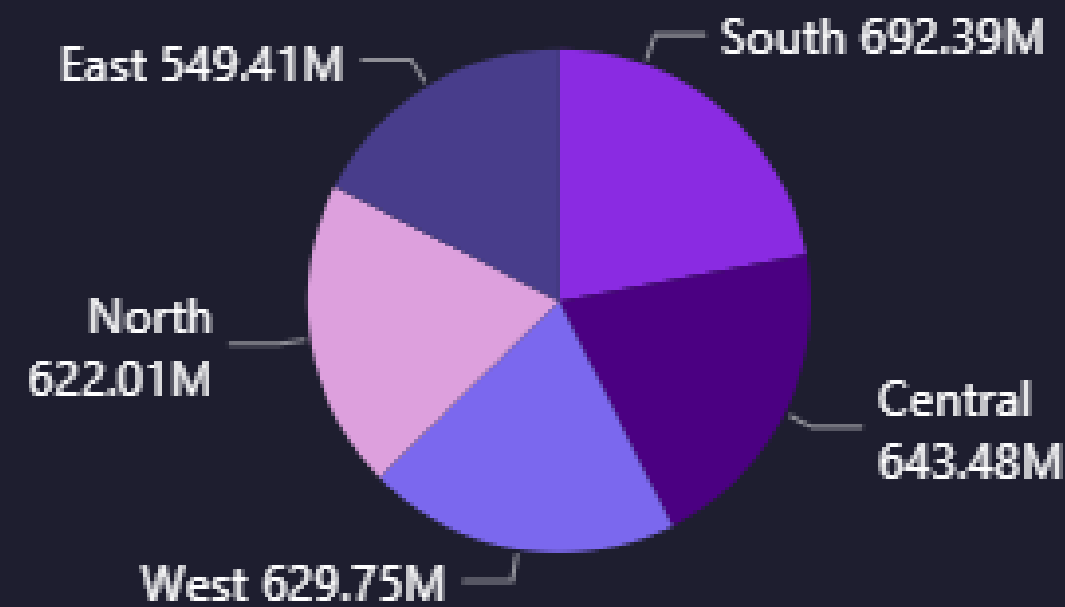
Uses artificial intelligence to analyze hotel data and improve revenue decisions.

Real-time dashboard and analytics



Provides live insights and visual reports for better business decisions.

Sum of Total_Revenue by Region



KEY TECHNOLOGIES

1. Improved Forecasting Accuracy

AI models predict demand more precisely, reducing overbooking or empty rooms.

2. Optimized Pricing Strategy

Dynamic pricing ensures the best room rates for higher revenue and occupancy.

3. Better Occupancy Management

Helps maintain a balance between room availability and profitability.

4. Data-driven Insights

Provides clear analytics for smarter business and marketing decisions.

5. Enhanced Guest Experience

Uses personalized offers and feedback analysis to improve customer satisfaction.

BENEFITS OF HOTEL

Better Occupancy
Management

Data-Driven Competitive Insights

Smart Pricing Optimization

REVENUE MANAGEMENT STRATEGIES & TACTICS

Market Segmentation

Pricing Strategy

Forecasting & Budget

Distribution

Measure KPIs

Inventory Management

Reporting

USE CASE SCERNARIO

Business Hotels: Leverage predictive analytics to maximize weekday corporate bookings and optimize room pricing.

Resort Hotels: Use AI-driven forecasting to manage seasonal peaks and enhance off-season profitability.

Boutique Hotels: Apply sentiment analysis on reviews to boost guest satisfaction and deliver personalized offers.

INSIGHTS AND FINDINGS

- **Boutique and Budget** hotels generate the highest revenue.
- **Corporate booking channels** contribute the most to total revenue, followed by travel agents.
- The **Deluxe room type** has the highest booking frequency.
- The **South and North regions** show consistently strong revenue performance.
- The **Corporate customer type** accounts for a larger share of the total revenue.

CONCLUSION

This analysis provides a comprehensive understanding of hotel performance metrics, allowing data-driven business strategies. The dashboards help management evaluate profitability, occupancy, and customer behaviour effectively. By leveraging these insights, hotels can improve demand forecasting, optimize pricing models, and maintain an ideal balance between occupancy and profit. The study emphasizes the importance of data analytics in enhancing the operational and financial efficiency of the hospitality industry.