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.

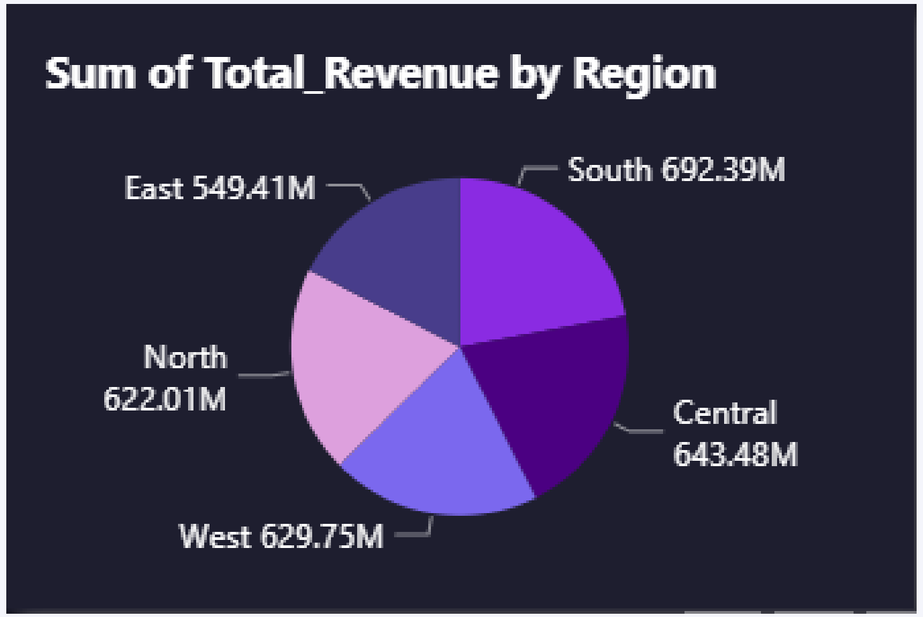
Role of AI

AI helps hotels make smarter and faster decisions.

Problem Statement

THE MAIN OBJECTIVE OF OUR PROJECT IS TOO 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.



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.

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

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.