

Hotel Booking Analysis

Data-Driven Insights for Business Optimization

Presented by: **Syed Muhammad Ali**

Date: January 22, 2026

Executive Summary

This report analyzes **119,391 hotel booking records** from Resort and City Hotels to understand booking patterns, cancellation trends, and revenue opportunities. Our analysis reveals critical insights that can help improve booking retention and optimize pricing strategies.

Key Findings at a Glance

Metric	Value	Impact
Overall Cancellation Rate	37%	High Risk
City Hotel Cancellations	42%	Critical
Resort Hotel Cancellations	28%	Moderate
Top Cancellation Country	Portugal (71%)	Concentrated Risk
Primary Booking Channel	Online Agencies (47%)	High Volume

1. The Cancellation Challenge

The Problem: Nearly 4 out of every 10 bookings (37%) are being canceled. This represents a significant revenue loss and creates operational challenges in planning and resource allocation.

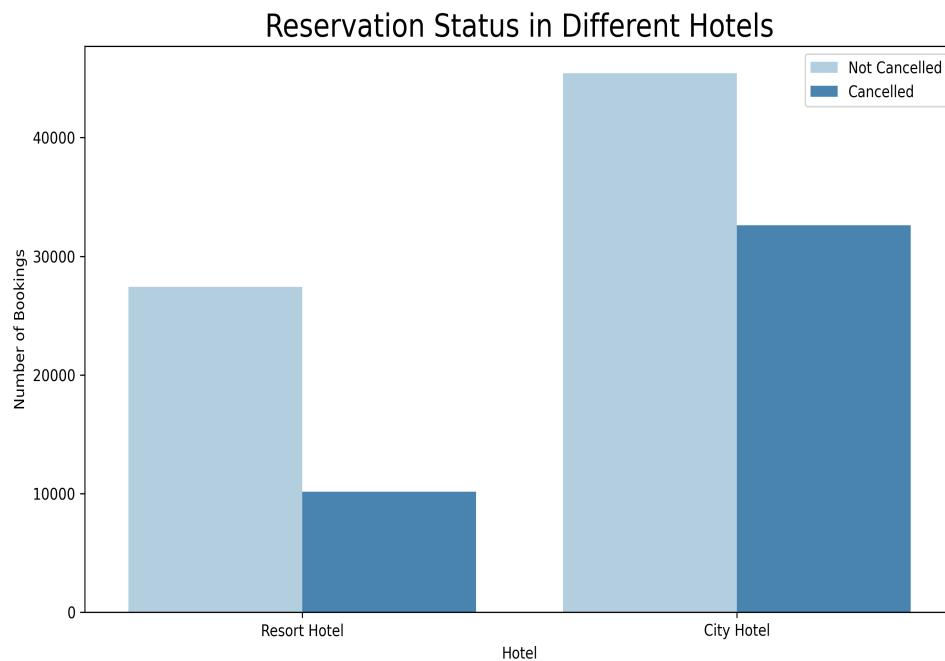


What This Means for Your Business:

- Lost revenue from 37,000+ canceled bookings
- Difficulty in accurate revenue forecasting
- Wasted resources on bookings that don't materialize
- Challenges in staff scheduling and planning

2. City vs Resort Hotels: A Tale of Two Properties

Key Discovery: City Hotels face a 42% cancellation rate, while Resort Hotels have a more manageable 28% rate. This 14-percentage-point difference reveals that business travelers (who prefer city hotels) are less committed to their bookings than leisure travelers (who prefer resorts).

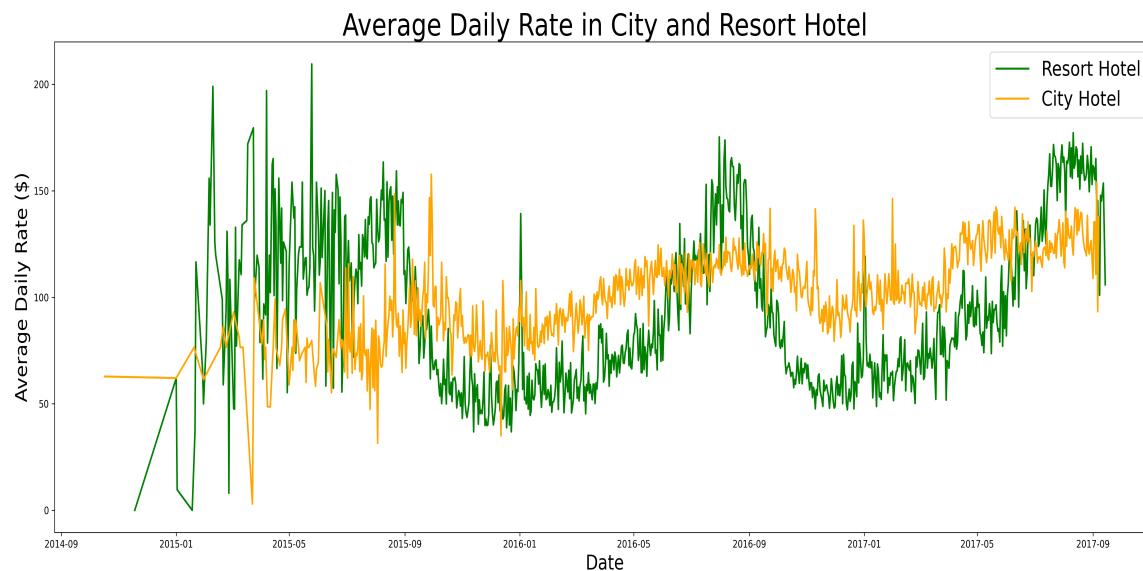


Strategic Implications:

- City hotels need stricter cancellation policies
- Focus retention efforts on business travelers
- Resort hotels should maintain current strategies
- One-size-fits-all approach won't work

3. Understanding Pricing Patterns

Pricing Intelligence: Our analysis shows both hotel types maintain competitive pricing, with average daily rates ranging from \$50-\$150. City hotels show more price volatility due to fluctuating business travel demand, while resort hotels maintain steadier pricing patterns.

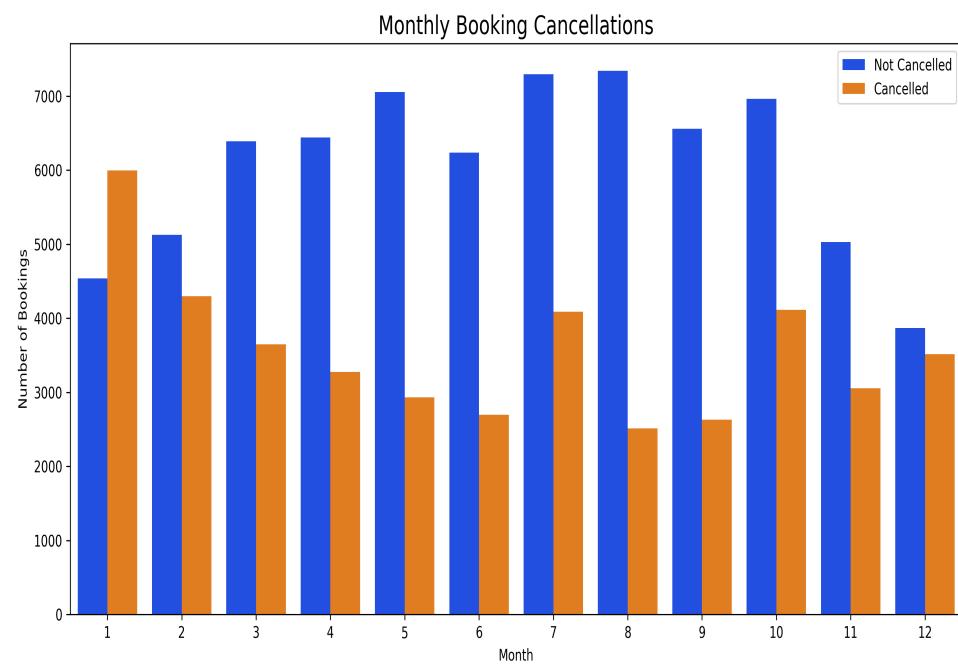


Revenue Opportunity:

- Both properties are competitively priced
- Seasonal pricing adjustments are working well
- Focus should shift to retention rather than pricing changes
- Dynamic pricing based on cancellation risk could be explored

4. Seasonal Booking Patterns

Seasonal Intelligence: Summer months (June-August) show the highest booking volumes AND the highest cancellation volumes. This creates both opportunity and risk. The good news is that cancellations are predictable and follow booking patterns.

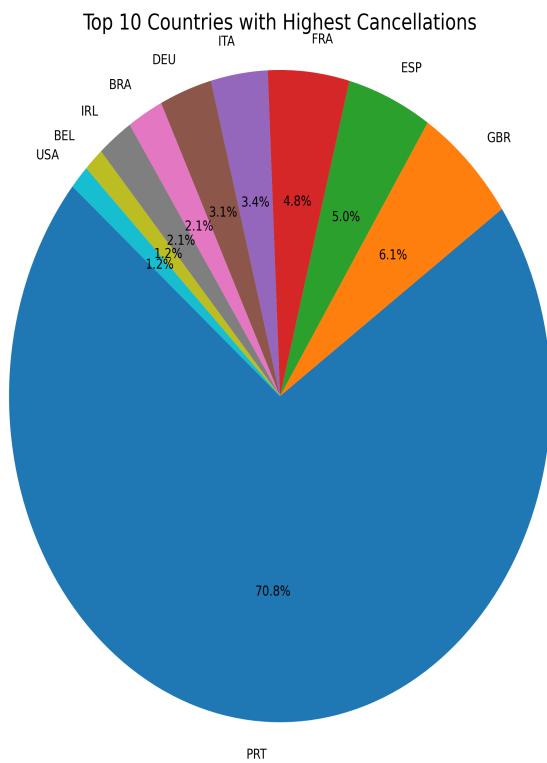


Action Plan:

- Implement stronger retention efforts before summer season
- Consider stricter cancellation policies during peak months
- Offer early-bird discounts with commitment requirements
- Use flexible policies in winter to maintain occupancy

5. The Portugal Problem: Geographic Insights

Critical Finding: Portugal dominates cancellations with an overwhelming 71% of all canceled bookings. This concentration in a single market represents both a risk and an opportunity for targeted intervention.

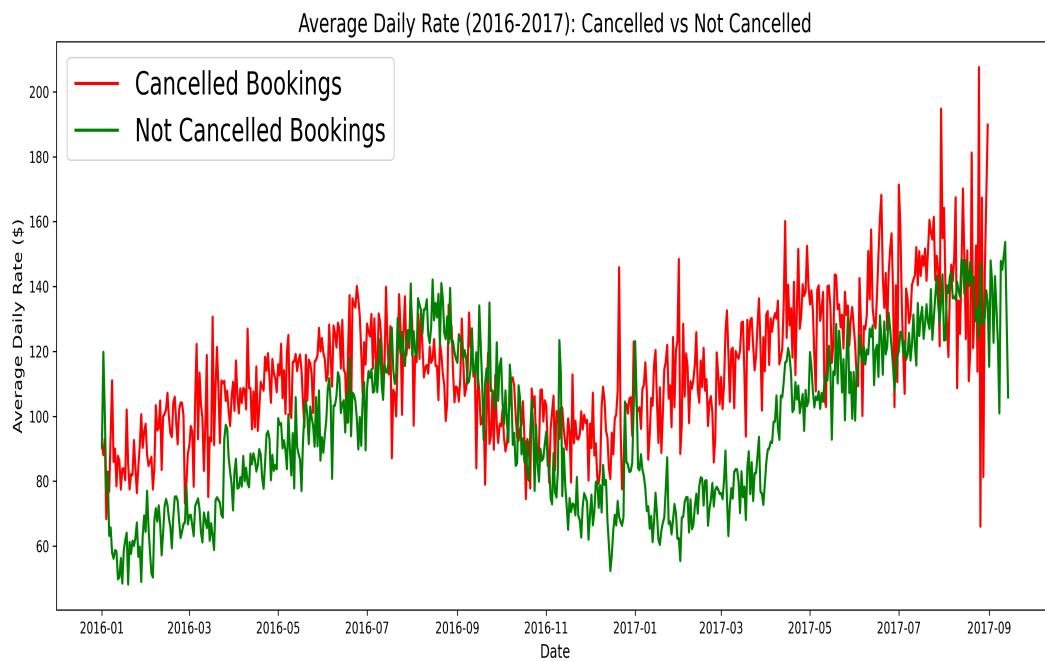


Recommended Actions:

- Investigate: Why are Portuguese guests canceling at such high rates?
- Communicate: Improve Portuguese language support and customer service
- Incentivize: Create targeted retention programs for Portuguese market
- Partner: Work closely with Portuguese travel agencies to improve booking quality

6. The Price-Cancellation Connection

Interesting Pattern: Our analysis reveals that canceled bookings tend to have slightly higher prices than completed bookings. This suggests price sensitivity plays a role in cancellation decisions. Higher-priced bookings may attract more cautious guests who are more likely to reconsider.



Strategic Response:

- Consider tiered pricing with different cancellation terms
- Offer incentives for non-refundable premium bookings
- Create loyalty programs to offset price concerns
- Provide price guarantees for committed bookings

Strategic Recommendations

Immediate Actions (Next 30 Days):

1. Launch Portugal-Focused Retention Campaign

- Partner with Portuguese travel agencies
- Improve Portuguese language support
- Create special offers for Portuguese market

2. Implement Tiered Cancellation Policies

- Offer discounts for non-refundable bookings
- Introduce flexible rebooking options
- Create premium packages with flexible terms

3. Focus on City Hotel Retention

- Develop corporate loyalty programs
- Offer booking guarantees for business travelers
- Implement pre-arrival confirmation system

Medium-Term Strategies (3-6 Months):

4. Optimize Online Booking Channels

- Work with OTAs to improve booking quality
- Incentivize direct bookings with exclusive perks
- Implement booking verification systems

5. Dynamic Pricing Implementation

- Adjust prices based on cancellation risk profiles
- Offer seasonal promotions with commitment terms
- Test different pricing strategies by market segment

6. Data-Driven Decision Making

- Implement real-time cancellation tracking dashboard
- Develop predictive models for cancellation risk
- Regular monthly analysis of booking patterns

Expected Business Impact

Initiative	Expected Impact	Timeline
Portugal-focused retention	10-15% reduction in cancellations	3 months
Tiered cancellation policies	5-8% increase in non-refundable bookings	2 months
City hotel improvements	8-12% reduction in city cancellations	4 months
Channel optimization	15-20% increase in direct bookings	6 months
Dynamic pricing	5-10% revenue increase	6 months

Conclusion

The analysis reveals significant opportunities for revenue optimization through strategic cancellation reduction. By implementing targeted retention strategies, especially for the Portuguese market and city hotels, and optimizing booking channels, we can potentially recover millions in lost revenue annually.

The key to success lies in understanding that different guest segments require different approaches. Business travelers need flexibility and loyalty incentives, while leisure travelers respond to value propositions and early booking discounts.

With a data-driven approach and consistent execution of recommended strategies, we expect to see measurable improvements in cancellation rates within 3-6 months, leading to increased revenue stability and improved operational efficiency.

Prepared by: Syed Muhammad Ali

Data Analyst

Report Date: January 22, 2026

Contact: Available for detailed analysis and implementation support