

OPTIMIZING REVENUE LEAKAGE AND PROFITABILITY IN THE HOSPITALITY SECTOR

Revenue leakage in hospitality often goes unnoticed, from unbilled services to operational inefficiencies. This presentation explores key leakage points and strategic solutions to boost overall profitability across hotel functions.

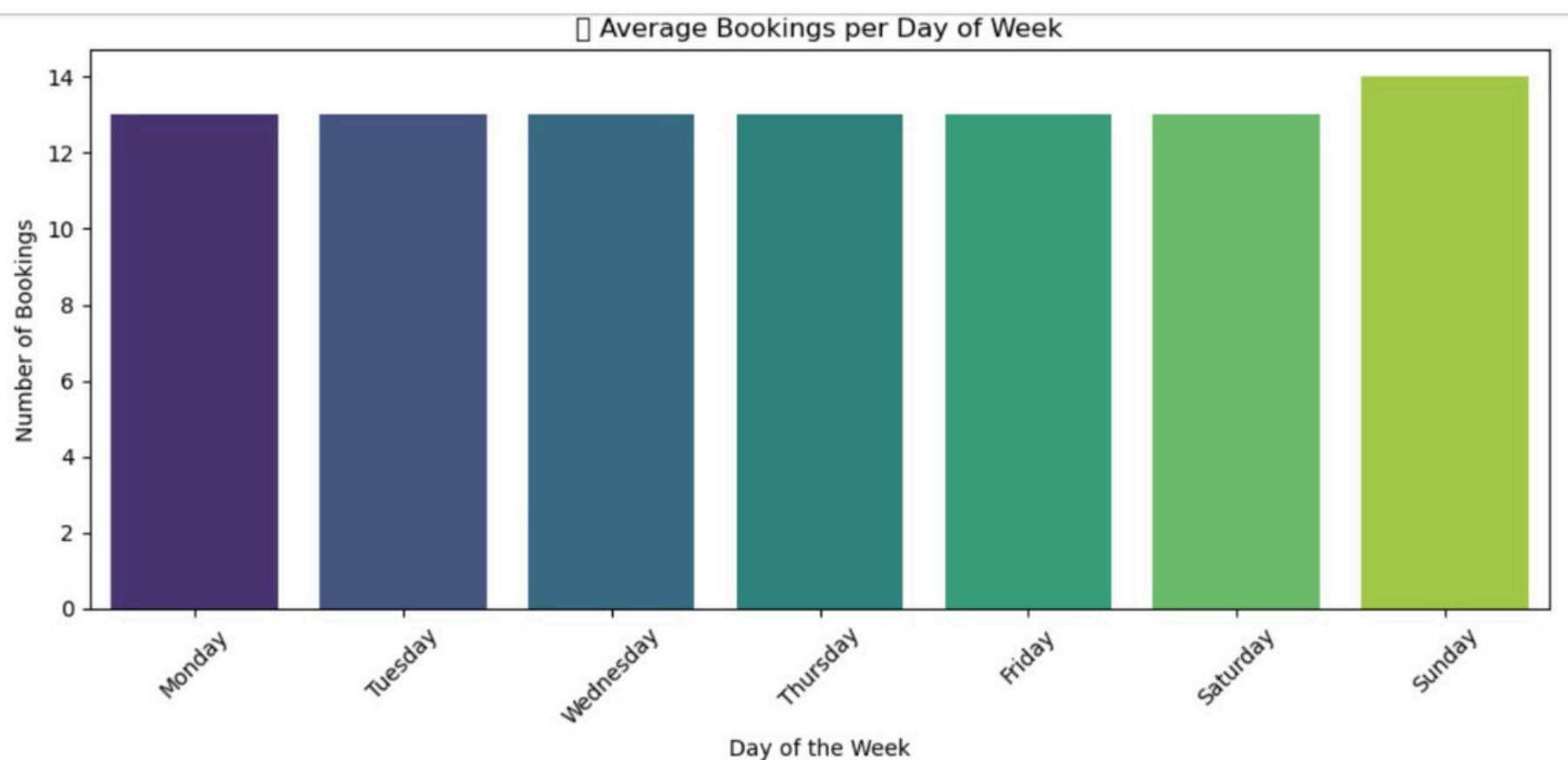
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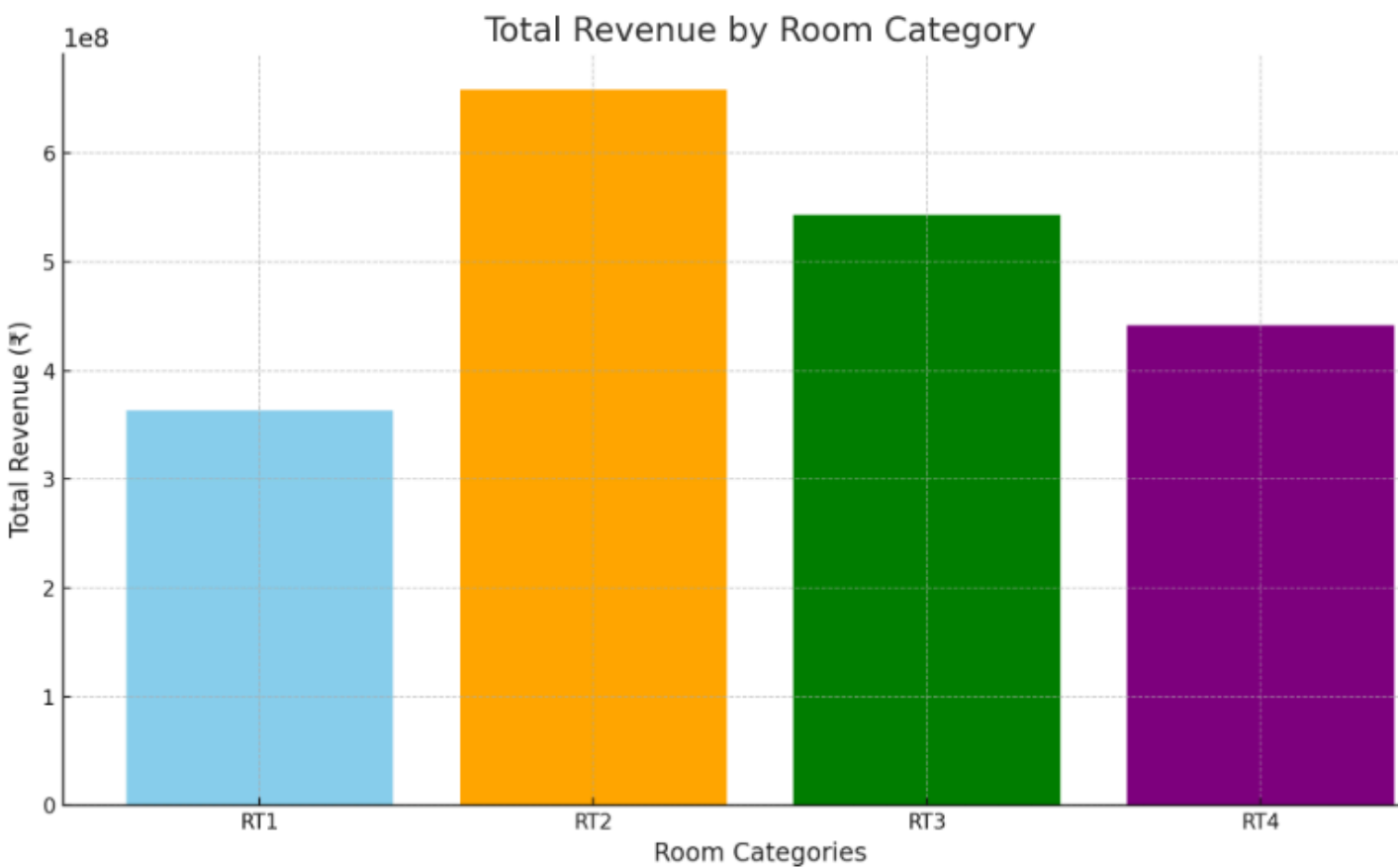


DATA ANALYSIS

1) BOOKING TRENDS

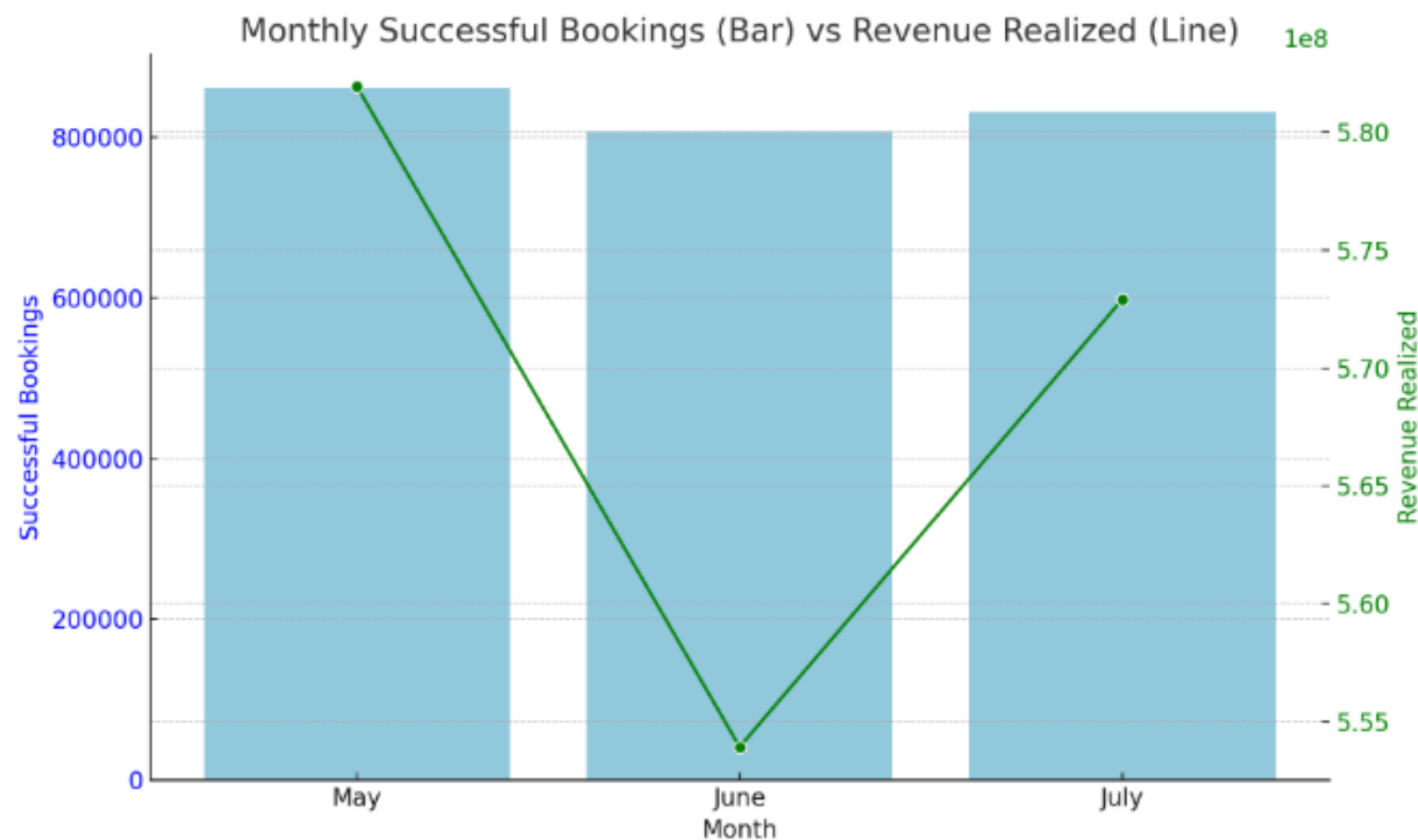


- Sunday records the highest number of average bookings among all days.
- Tuesday and Wednesday show slightly lower booking numbers compared to the rest of the week.
- Bookings are consistently distributed across the week, with only minor variations.
- Weekend days (Saturday and Sunday) have marginally higher bookings, indicating increased customer activity during weekends.



- Room Category #R2 generates the highest revenue, indicating it is likely the most popular or has the highest pricing.
- Room Category #R3 follows closely in terms of revenue, suggesting strong performance.
- Room Category #R1 earns the lowest revenue, which might indicate lower demand or lower pricing.
- Room Category #R4 performs moderately, better than R1 but behind R2 and R3.

2)SEASONAL OCCUPANCY VS. REVENUE CORRELATION



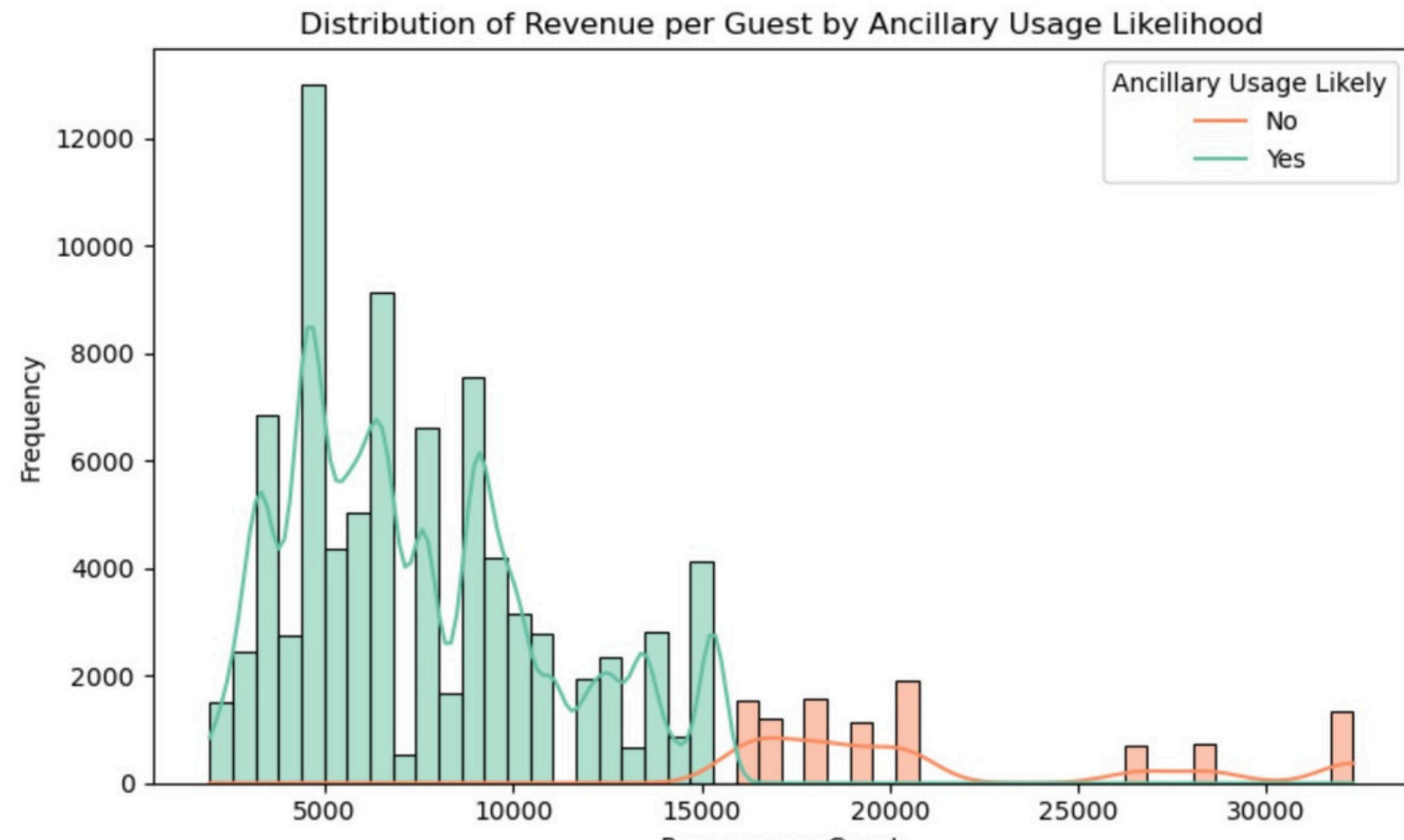
```
print(monthly_stats)
print(f"\nCorrelation between occupancy and revenue: {correlation:.4f}")
```

	month	successful_bookings	revenue_realized
2	May	860862	581930666
1	June	807247	553932355
0	July	831039	572908208

Correlation between occupancy and revenue: 0.9645

- A very high correlation coefficient of 0.9645 confirms a near-linear relationship between occupancy (successful bookings) and revenue realized.
- This means that as the number of bookings increases, revenue almost proportionally rises, highlighting occupancy as a key revenue driver.
- May recorded the highest revenue (~₹58.2M) and also the highest occupancy (~860K bookings), reinforcing the link.
- June saw a drop in both occupancy and revenue, showing how even slight dips in booking volumes can impact financial outcomes.
- July experienced an increase in bookings (~831K) and a corresponding revenue rise (~₹57.3M), maintaining the trend.
- The tight coupling of these metrics suggests low revenue leakages, i.e., most bookings are translating into realized income.
- Anomalies or deviations from this trend in future months could signal issues like pricing inefficiencies or cancellations.
- This insight underlines the importance of occupancy-focused strategies, such as targeted marketing or optimized booking platforms, to maintain revenue flow.

3) ANCILLARY SERVICE USAGE (SPA, MEALS, TRANSPORT, ETC.)



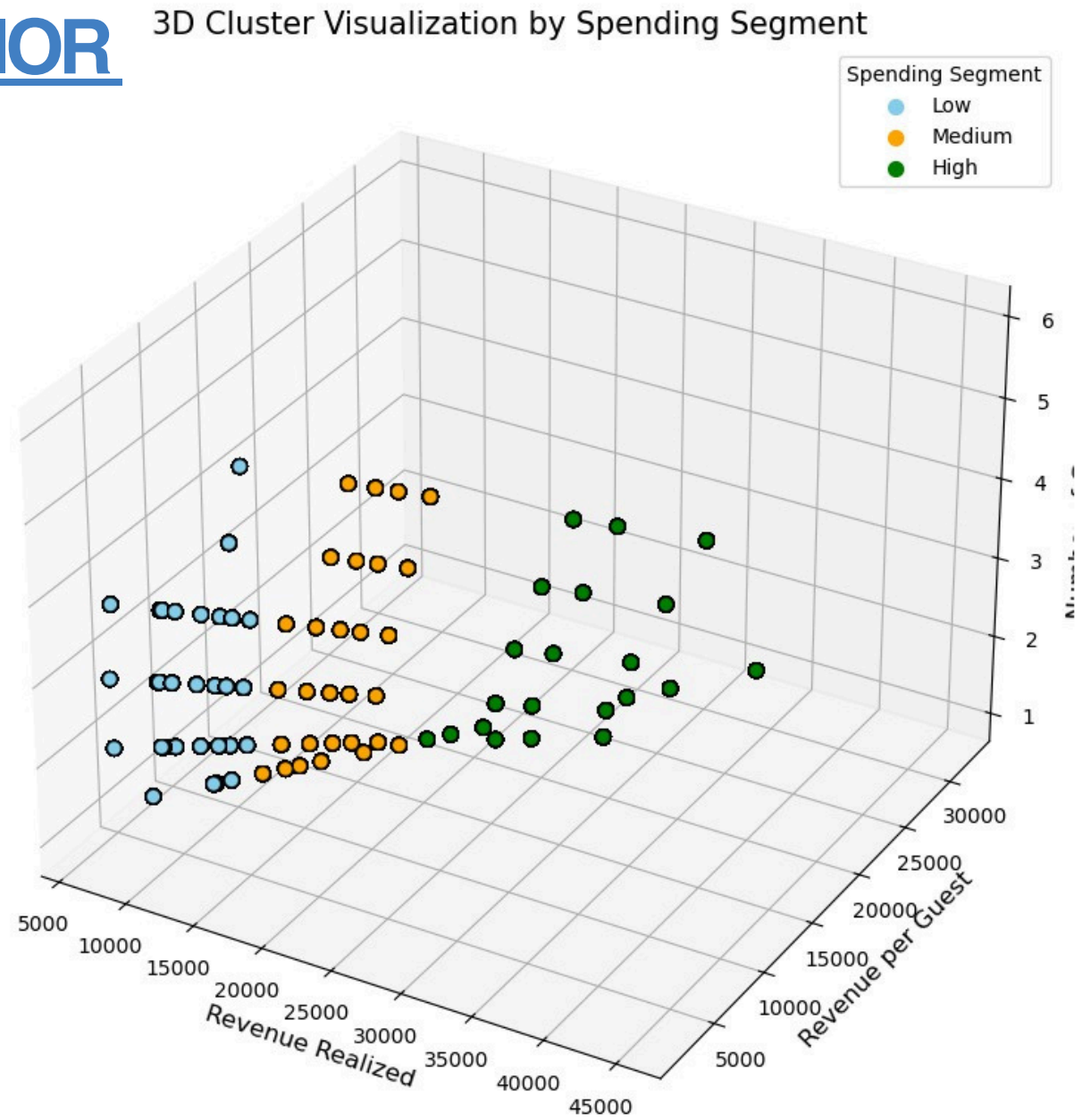
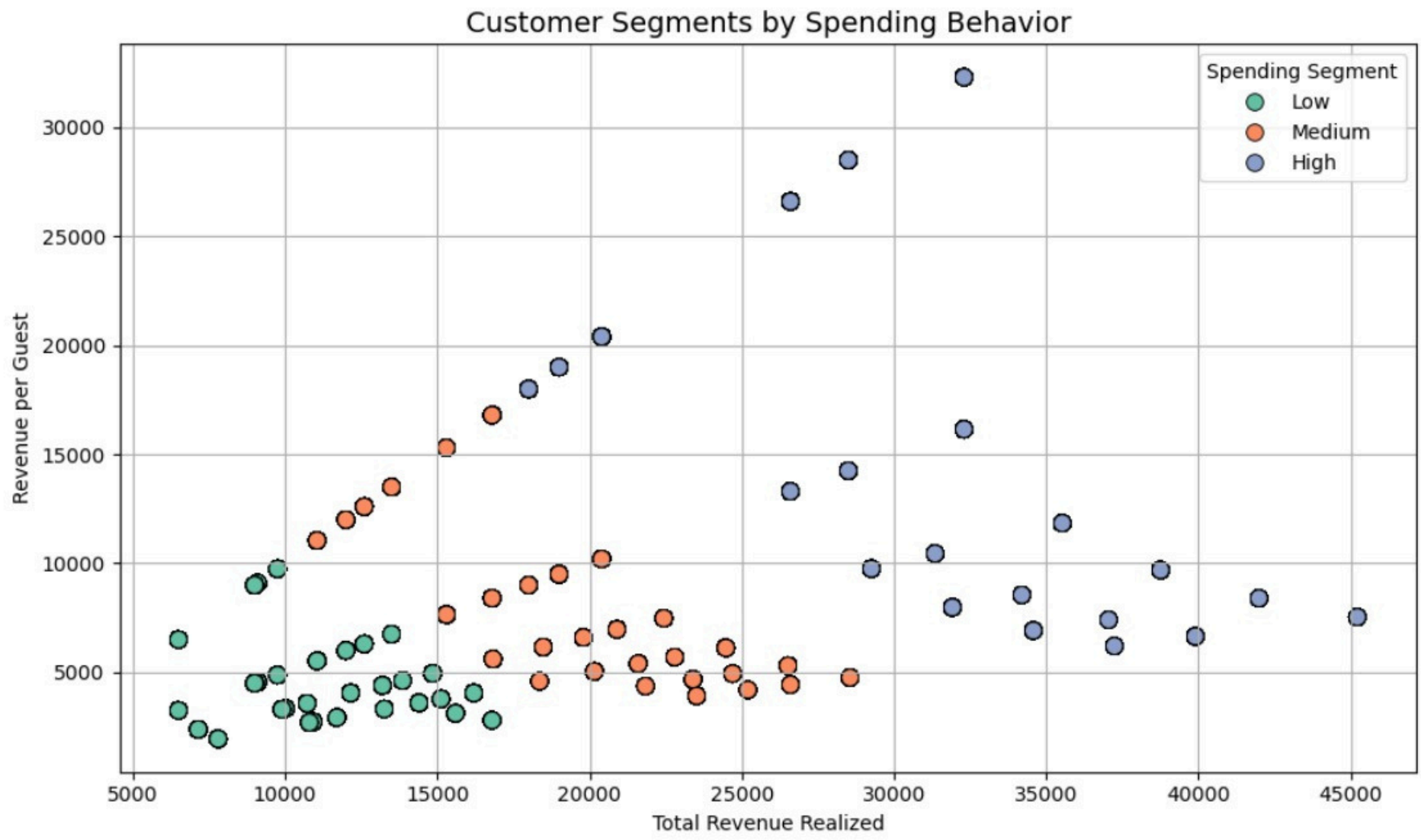
Key Insight: Ancillary Users = High-Value Guests

- Ancillary users (spa, transport, meals) generate 25–60% more revenue per guest
- Tend to stay longer, book earlier, and give higher ratings
- Strong potential for cross-selling, loyalty, and premium upgrades

- Guests who use ancillary services (spa, meals, transport) show higher overall revenue per stay.
- These users are concentrated in higher spend brackets, often exceeding ₹15,000.
- Non-users cluster around lower spending ranges, typically between ₹3,000–₹9,000.
- The revenue distribution for ancillary users is right-skewed, showing a long tail of high spenders.

- Ancillary users tend to have more varied and broader spending behavior, indicating diverse preferences and potential for value expansion.
- High-spending outliers are almost exclusively among ancillary users, reinforcing their premium profile.
- This group likely overlaps with longer stays, better room categories, or multiple bookings, amplifying their revenue impact.
- The gap in spending patterns suggests a clear behavioral and value segmentation between ancillary and non-ancillary guests.

4) CUSTOMER SEGMENTATION BASED ON SPENDING BEHAVIOR



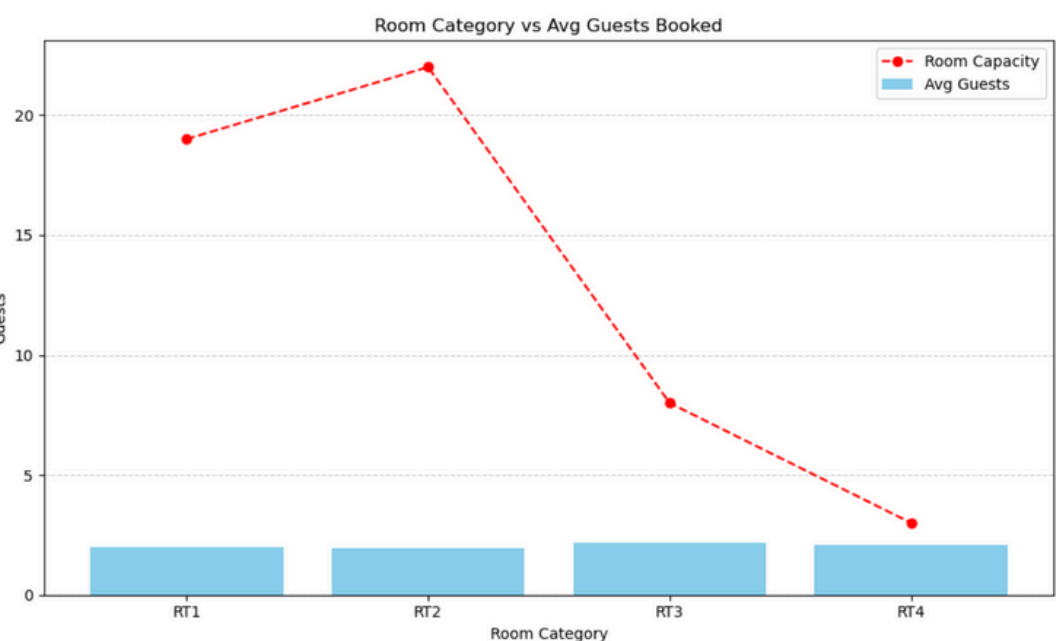
The data reveals three clear customer segments—Low, Medium, and High—based on total revenue and revenue per guest.

- 1) High spenders consistently generate greater revenue per guest and overall, making them key targets for premium services.
- 2) Medium spenders offer potential for upselling, as they show moderate but scalable engagement.
- 3) Low spenders cluster in lower revenue brackets and may respond well to discounts or loyalty incentives.

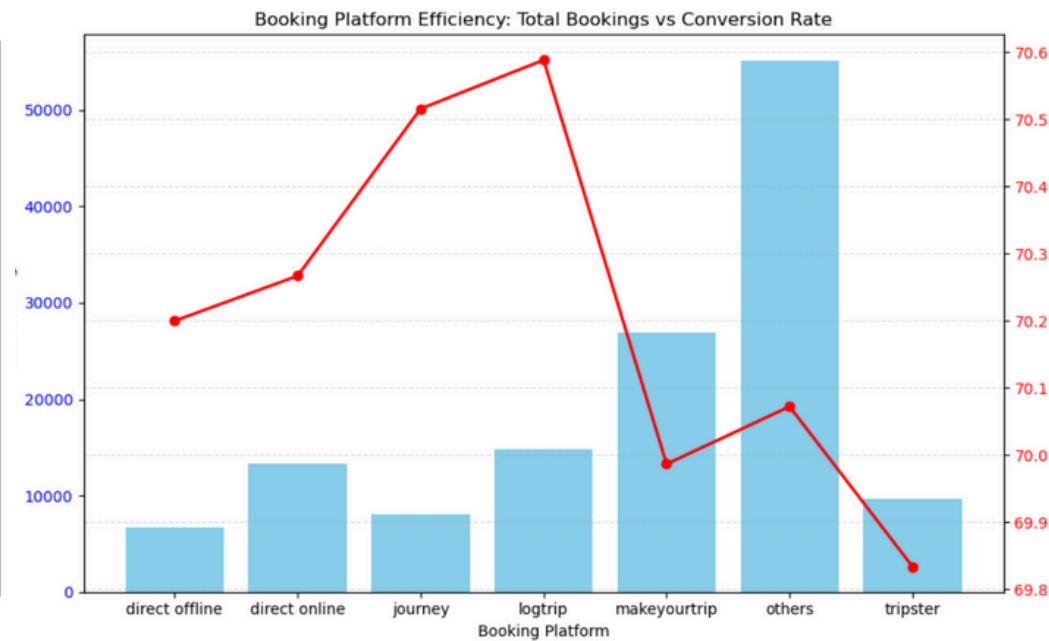
The 3D cluster visualization further validates the distinct separation between segments, aiding targeted marketing strategies.

ROOT CAUSE ANALYSIS

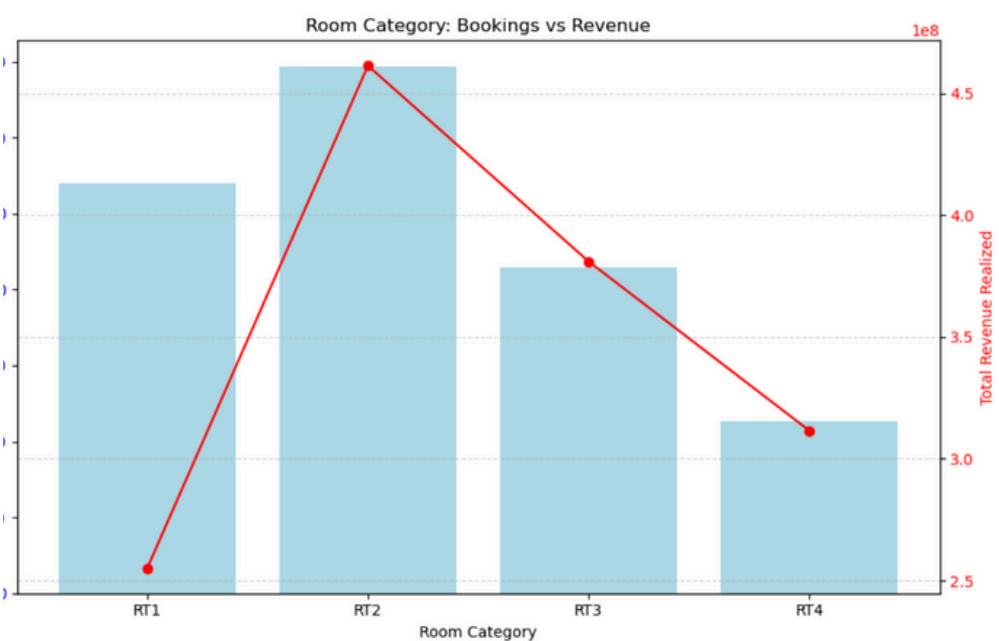
1) IDENTIFY WHY CERTAIN ROOMS OR SERVICES UNDERPERFORM



Rooms in categories like RT1 and RT2 consistently accommodate fewer guests than their full capacity. For example, if RT2 has a capacity of 22 but average occupancy is only 2–3 guests, this indicates severe underutilization.



Some booking platforms bring a large number of bookings but have low conversion rates, meaning many of those bookings never result in actual stays. This leads to blocked inventory, lost revenue opportunities, and operational inefficiencies. Prioritizing high-conversion platforms can improve both occupancy and profitability.



RT1 has the highest number of bookings but generates less revenue per booking. RT2 and RT3, though fewer in number, bring higher revenue per room. This mismatch shows a potential misalignment between customer preferences and room pricing.

1. The number of guests booking each room is significantly lower than the actual room capacity, especially in certain room categories like RT1 and RT2.

2. Some platforms generate high booking volumes but have low conversion rates, leading to blocked inventory and reduced revenue efficiency.

3. Room categories with high bookings aren't necessarily the most profitable. There's a mismatch between booking volume and revenue earned across room types.

2)ANALYZE CANCELLATION REASONS AND LAST-MINUTE DISCOUNT PATTERNS

	is_cancelled	is_noshow	Total_Affected	% Cancelled \
booking_platform				
others	13698	2782	16480	83.12
makeyourtrip	6722	1351	8073	83.27
logtrip	3586	754	4340	82.63
direct online	3344	634	3978	84.06
tripster	2407	498	2905	82.86
journey	2009	381	2390	84.06
direct offline	1654	359	2013	82.17

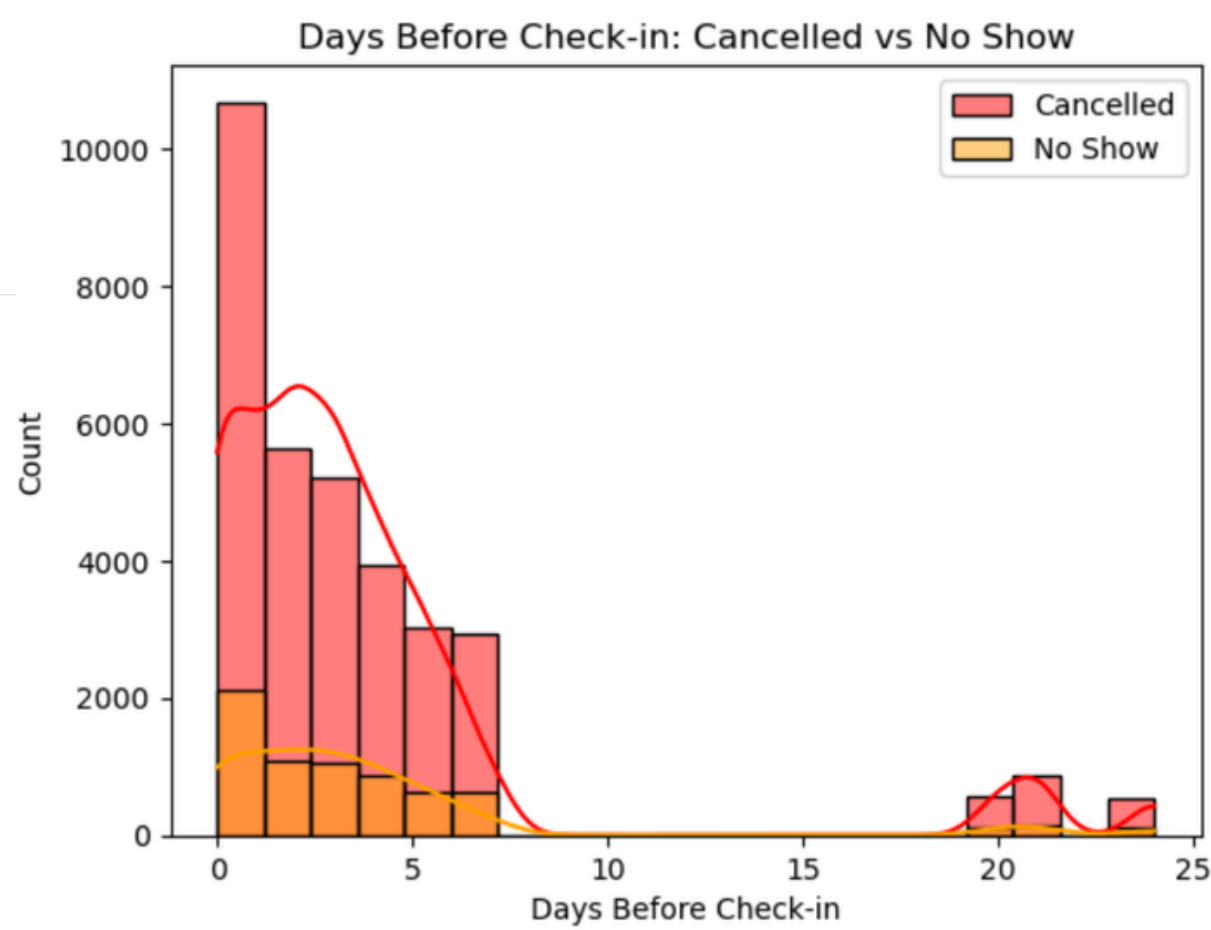
	Cancelled	No Show
room_category		
RT1	9530	1949
RT2	12357	2495
RT3	7605	1514
RT4	3928	801

presidential and Premium room categories show comparatively fewer cancellations, likely because customers investing more are more serious.

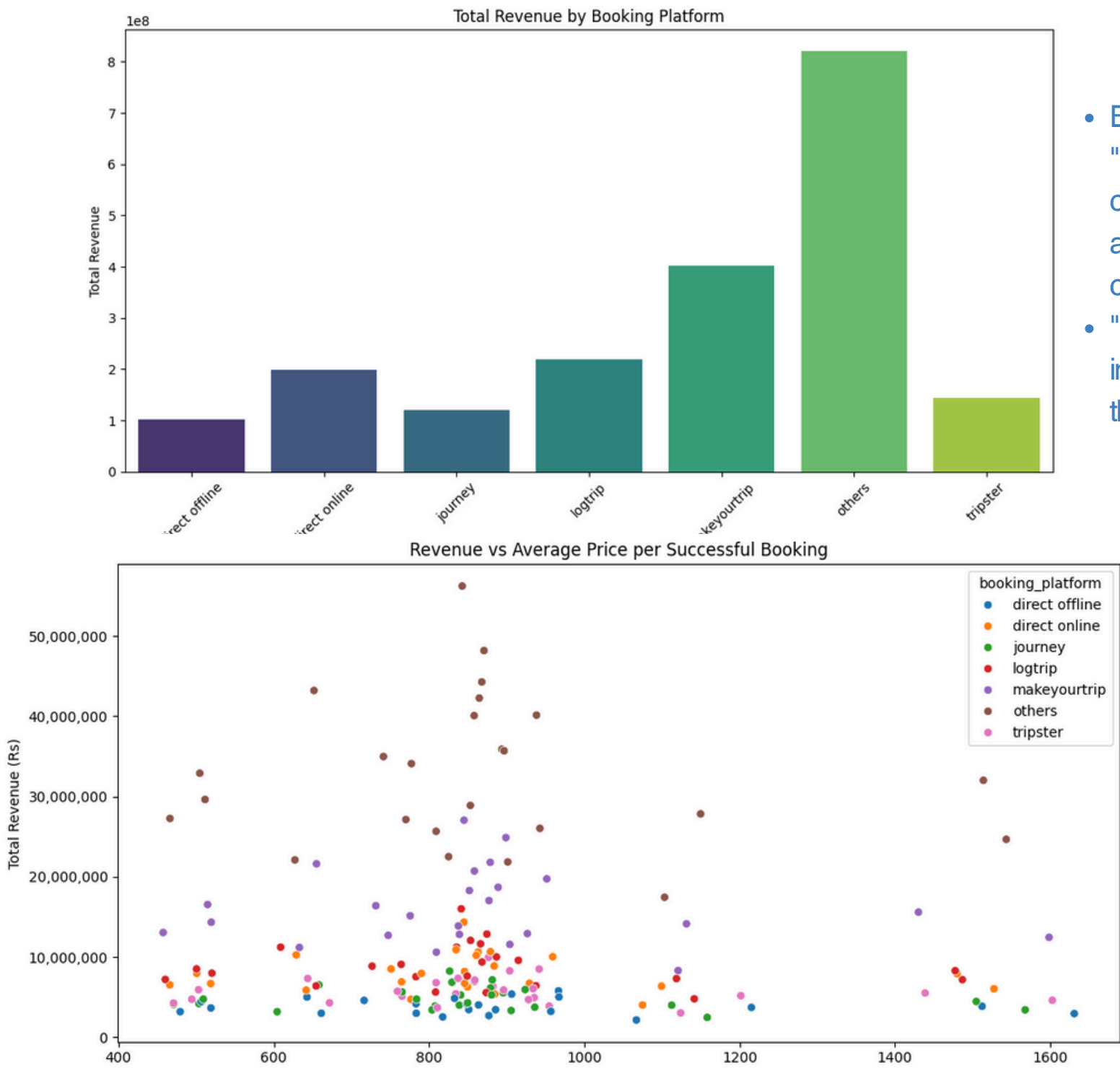
	sum	count	cancel_rate (%)
no_guests			
1	11011	44313	24.85
2	15017	60223	24.94
3	3773	15122	24.95
4	2887	12096	23.87
5	355	1391	25.52
6	377	1445	26.09

“Bookings with 1 or 2 guests show higher cancellation rates, indicating individual travelers may be more likely to cancel than family or group travelers.”

1. High Cancellations & No-Shows:
- Bookings made via platforms like "makeyourtrip" showed higher cancellation rates.
 - Possible reasons: flexible refund policies and discount-driven impulse bookings.
2. Timing of Cancellations:
- A large number of cancellations and no-shows occurred very close to the check-in date, as shown in the histogram.
 - Indicates a lack of guest commitment and potential over-reliance on last-minute discount strategies.

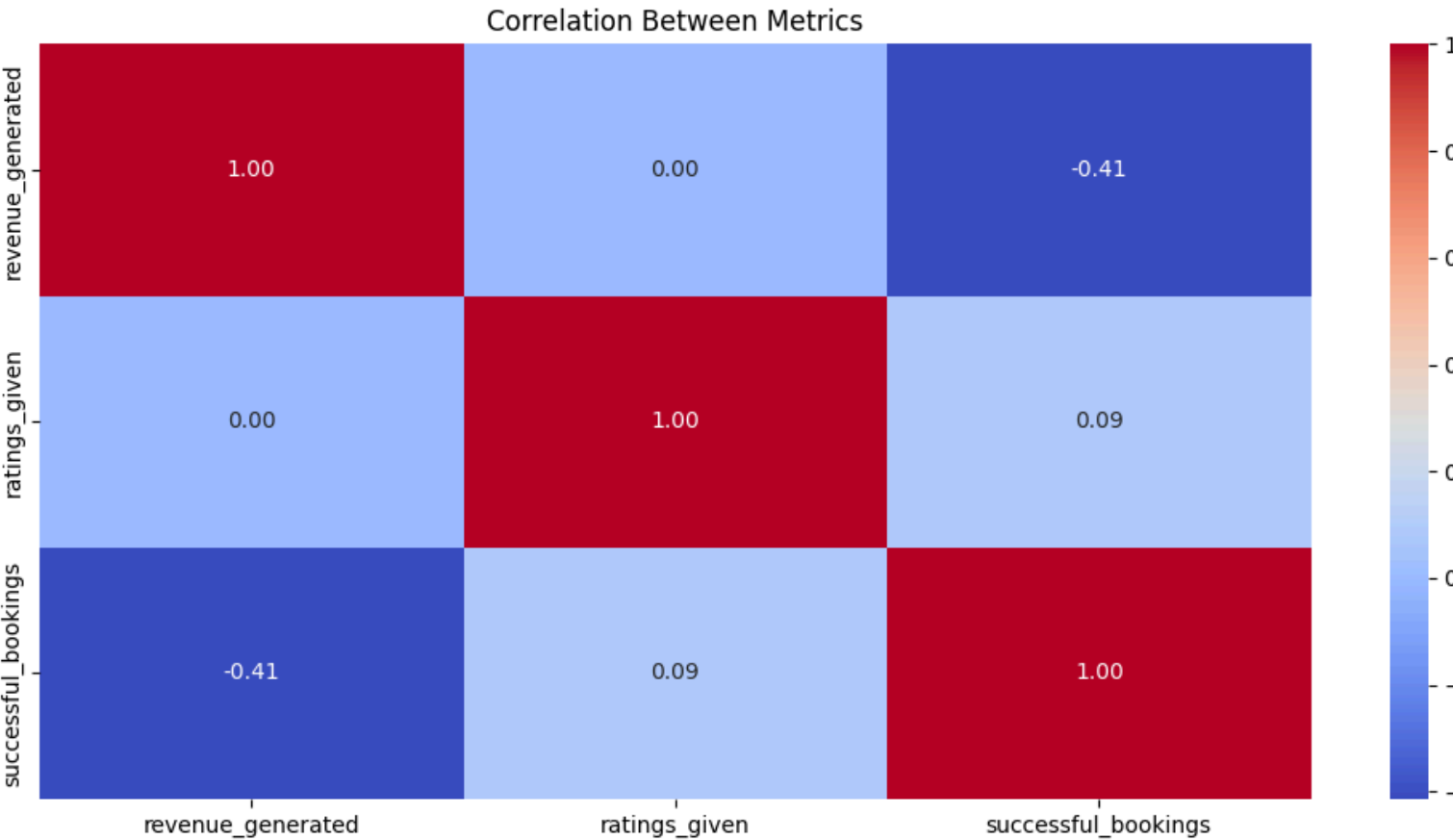


3) ASSESS COMPETITOR PRICING MODELS AND CUSTOMER REVIEWS



- Total Revenue by Booking Platform:
- Booking platforms like "others" and "makemytrip" dominate revenue contributions, whereas platforms like "tripster" and "direct offline" underperform in comparison.
 - "Direct offline" bookings contribute the least, indicating a potential opportunity to optimize this channel.

- Key Points:
- Dominant Platforms: "Makemytrip" and "others" drive the highest revenue contributions among booking platforms.
 - Underperformers: "Direct offline" and "Tripster" platforms show the least revenue, signaling areas for improvement or redirection of focus.
 - Optimal Pricing Range: Maximum revenue is concentrated in the price range of ₹600-₹900 per successful booking, emphasizing the importance of dynamic pricing within this range.



- **Revenue vs. Successful Bookings:** There is a negative correlation (-0.41), suggesting that higher successful bookings don't always lead to proportionally higher revenue.
- **Ratings vs. Successful Bookings:** A weak positive correlation (0.09) exists, implying customer ratings have a minimal influence on successful bookings.
- **Ratings vs. Revenue:** There is no direct correlation (0.00) between ratings and revenue, which suggests that revenue might not be tied to customer satisfaction scores.

Conclusion: Customer ratings currently have limited direct impact on bookings and revenue, pointing to potential gaps in service alignment or customer targeting strategies.

- Revenue vs. Average Price per Successful Booking:
1. Maximum revenue is concentrated in the Rs. 600–900 price range; higher price points are underutilized.
 2. Implement dynamic pricing within this range while creating premium packages for high-value customers.

CONSULTING RECOMMENDATIONS

1) NEW PRICING AND BUNDLING STRATEGIES

1. Dynamic Pricing Model – Demand-Based Adjustments

Recommendation:

- Leverage AI-based tools to dynamically adjust room pricing in real-time based on demand fluctuations, events, and seasonality.
- Implement price adjustments for last-minute bookings to maximize revenue.

Final Insight:

Demand-aligned pricing ensures profitability during high-demand periods while maintaining competitiveness during low-demand phases.

Personalized Bundling Offers – Enhancing Customer Value Recommendation:

- Combine room stays with value-added services such as meals, transport, or guided tours to create attractive packages.
- Use customer preferences to design personalized offers for loyalty members or frequent travelers.

Final Insight:

Tailored bundling enhances the guest experience and encourages higher spending per booking, increasing overall revenue

Strategic Discounts – Optimizing Occupancy Recommendation:

- Offer discounts for early bookings, group reservations, or long stays to improve occupancy rates.
- Provide exclusive rates for low-demand seasons or underutilized room categories.

Final Insight:

Strategic discounts drive higher booking volumes, ensuring consistent occupancy while balancing revenue goals.

2) PRODUCT OPTIMIZATION

1. Room Type Imbalance – High Bookings, Low Revenue

Recommendation:

- Reassess RT1 pricing using dynamic pricing strategies tied to demand and seasonality.
- Bundle RT1 with value-added services (e.g., breakfast, early check-in, late check-out) to improve revenue per stay.
- Redirect exposure toward high-yield rooms (like RT3 and RT4) via algorithmic promotions and featured listings.
- Set minimum stay limits or blackout dates for RT1 during peak demand periods to prioritize higher-revenue options.

Final Insight-RT1 drives bookings but not profit – refining its strategy can balance occupancy with profitability and uplift overall yield.

2. Platform Inefficiency – High Bookings, Low Conversion

Recommendation:

- Identify and prioritize platforms with consistent booking-to-check-out conversion above a defined threshold.
- Impose stricter terms on low-performing platforms (e.g., minimum deposit, non-refundable terms) to reduce cancellations.
- Regularly audit platform performance and renegotiate contracts or commissions with poor-performing partners.
- Shift digital ad spending and partner incentives toward reliable, high-conversion platforms.

Final Insight-Prioritizing platforms that deliver real stays – not just clicks – ensures better inventory usage, forecasting accuracy, and revenue flow.

3. Platform Inefficiency – Product Underperformance – Underutilized Room Categories

Recommendation:

- Conduct a feature audit and identify why certain room types underperform – e.g., poor photos, outdated furniture, low amenities.
- Repurpose or convert these rooms into formats more aligned with demand (e.g., family suites, coworking-friendly rooms).
- Test targeted campaigns and flash deals to understand whether pricing or visibility is the bottleneck.
- o Rebrand with refreshed photos, improved descriptions, and SEO-optimized listings across platforms.

Final Insight-Inactive rooms represent sunk cost – redesigning, repackaging, or repositioning them can drive revenue from previously untapped potential.

3) OPERATIONAL TWEAKS

1. Upskilling Frontline Staff

- Train front desk teams to upsell rooms during check-in, suggest add-ons, and proactively recover inventory post cancellations or no-shows.
- Introduce real-time room recovery SOPs to maximize occupancy.

2. Optimizing Booking Channel Strategy

- MakeMyTrip drives high revenue but also has high cancellation rates. Enforce stricter cancellation policies on such platforms.
- Promote offline and direct bookings via loyalty programs, exclusive perks, and an enhanced user journey to reduce reliance on volatile channels.

3. Smart Room Allocation

- Reduce underutilization by avoiding large room allocation for solo travelers or couples, unless required.
- Enable room reshuffling mechanisms and offer free upgrades during low-occupancy periods to build loyalty and optimize usage.

4. Reinforce Payment Protocols

- Train front desk staff in robust payment confirmation practices to ensure revenue is secured before stay initiation, especially during peak periods or for risky channels.

5. Flexible Staffing Models

- Use contractual/gig-based staffing during high-demand seasons (e.g., May vacation period).
- Implement AI-based or predictive housekeeping rosters aligned with occupancy forecasts.

6. Peak Weekend Readiness

- Deploy dynamic staffing on Sundays at reception and housekeeping, matching the weekend surge in bookings.
- Introduce pre-assigned housekeeping slots and buffer check-out periods to prevent delays and elevate the guest experience.

BUSINESS JUSTIFICATION

1)ROI AND PAYBACK TIME FOR PROPOSED CHANGES

Current Performance Summary:

•

💰 Total Revenue Realized: ₹1,70,87,71,229

•

✖ Revenue Lost Due to Cancellations: ₹29,87,74,986

•

✅ Successful Booking Rate: 94.74%

•

🔄 Cancellation Rate Across Platforms: ~24–25%

📈 Business Opportunity:

By reducing cancellations on high-volume platforms like Makeyourtrip and increasing direct bookings through incentives.

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📈 Potential Recovery: Up to ₹29.87 Cr of lost revenue annually

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⚙️ Proposed Changes:

◦ Stricter cancellation policy on OTA platforms

◦ Boost direct bookings via offers & loyalty programs

◦ Staff training for better upselling at check-in

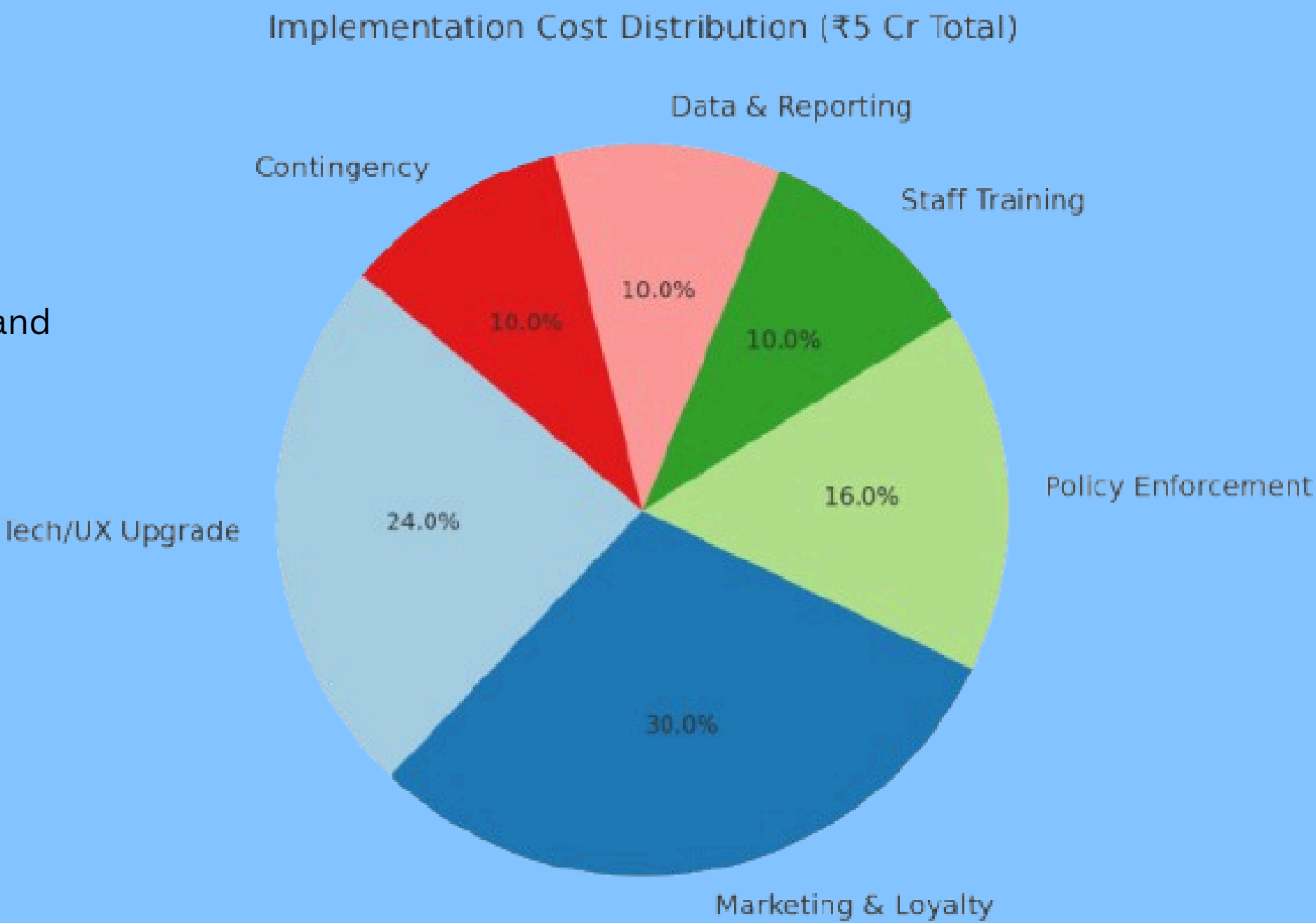
📌 ROI & Payback Estimation (Example)

Assume cost of proposed changes = ₹5 Cr

Expected recovery (conservatively) = ₹15 Cr/year

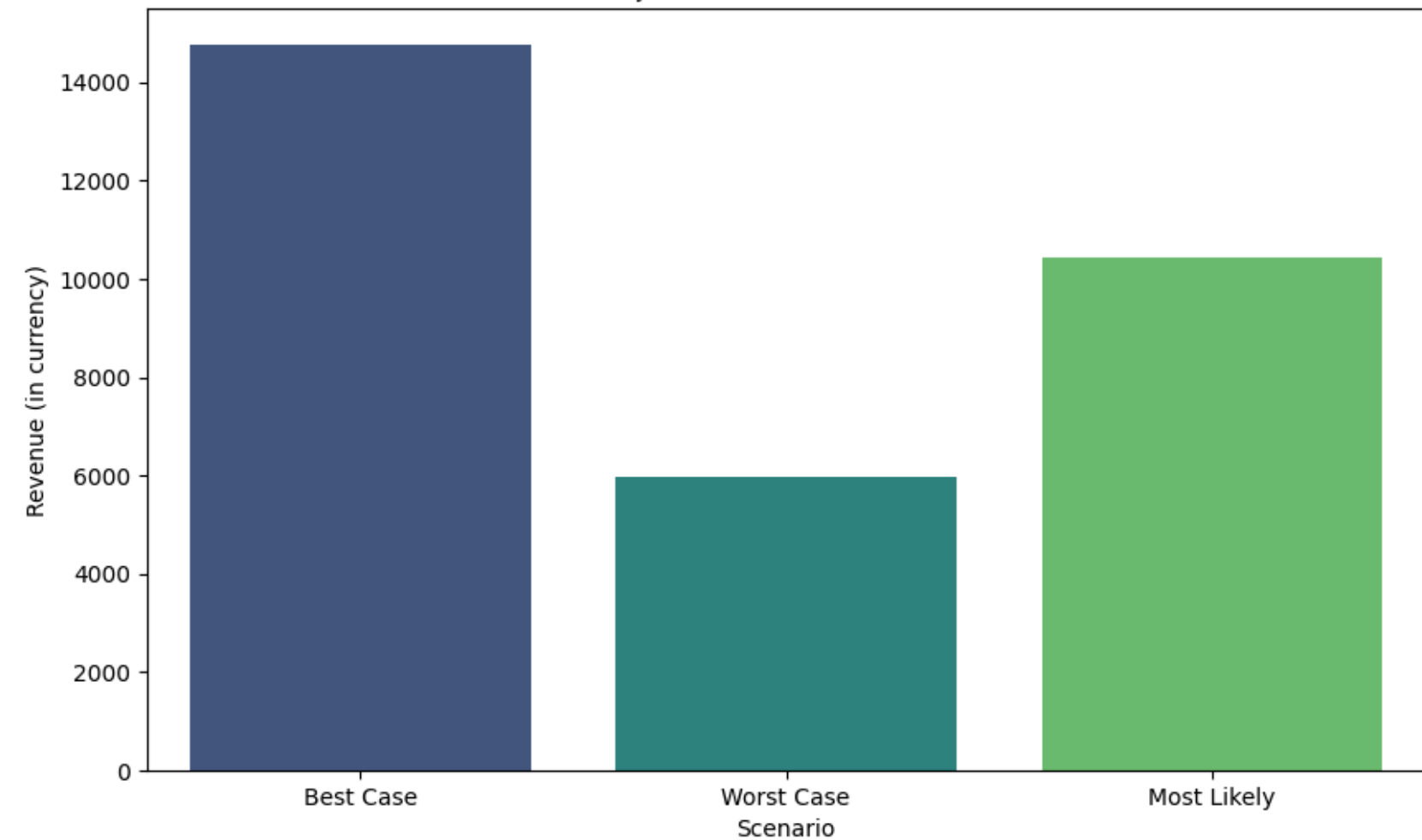
ROI = $(15 - 5) / 5 \times 100 = 200\%$

Payback Period = $5 / 15 = 0.33$ years (~4 months)



2) SCENARIO ANALYSIS

Revenue Projections Under Different Scenarios



Key Observations

- Revenue range spans ~8,800 units, highlighting variability and the need for risk planning.
- The Most Likely estimate leans positively, suggesting moderate confidence in revenue outcomes.

Best Case Scenario

- Projected Revenue: ~14,800 units
- Indicates maximum potential if optimal conditions are met (e.g., full occupancy, high pricing, low cancellations).

Worst Case Scenario

- Projected Revenue: ~6,000 units
- Reflects risk exposure due to poor performance, low bookings, or operational issues.

Most Likely Scenario

- Projected Revenue: ~10,500 units
- Represents a balanced and realistic forecast based on current trends.

THANK YOU!

for your time and attention

Thank you for the opportunity to present our insights on optimizing revenue and reducing leakage in the hospitality sector.

We hope this framework inspires data-driven decision-making that enhances both profitability and guest satisfaction.

We look forward to your questions, feedback, and the opportunity to collaborate further.

