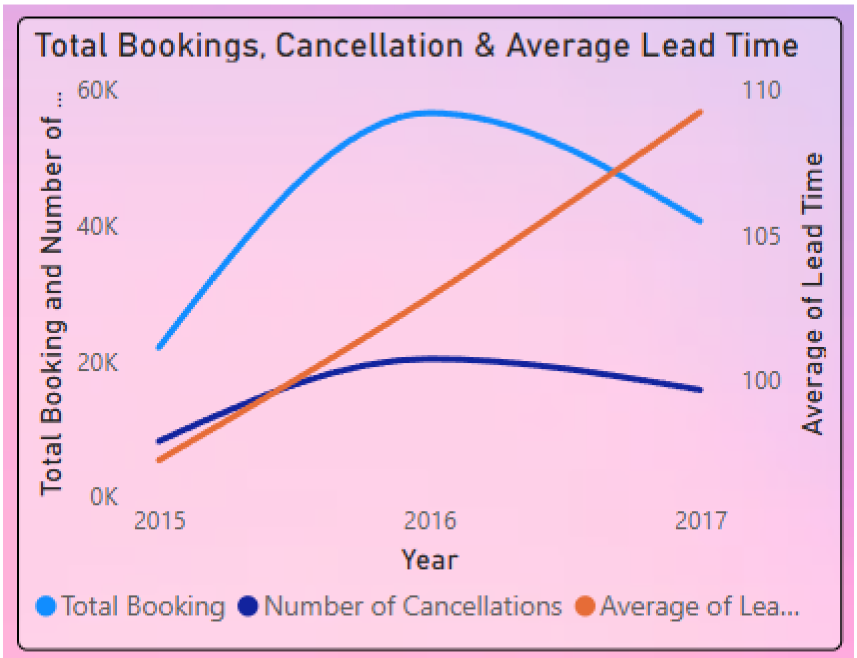
PowerBI Questions

➔ Visualize booking trends over the years, including the number of bookings, cancellations, and average lead time. Identify seasonality patterns.



Key Metrics Overview

- **Total Bookings**: Peaked around 60K in recent years (2016-2017) after growing from 0K in 2015
- **Cancellations**: Shown as a subset of total bookings (exact proportion not specified)
- **Average Lead Time**: Increased from approximately 100 days in 2015 to 110 days in 2017

Trend Analysis

1. **Exponential Growth**:
    - Bookings grew rapidly from 0K in 2015 to 60K by 2016-2017
    - This suggests either a new business launch in 2015 or a major change in operations/marketing
2. **Lead Time Increase**:
    - The 10% increase in average lead time (100→110 days) indicates customers are booking further in advance
    - Possible reasons: increased demand, changes in cancellation policies, or seasonal factors

Seasonality Patterns

While the image doesn't show monthly data, the year-over-year comparison reveals:

- Steady growth trajectory without apparent seasonal dips
- Consistent performance in 2016-2017 after the initial launch year

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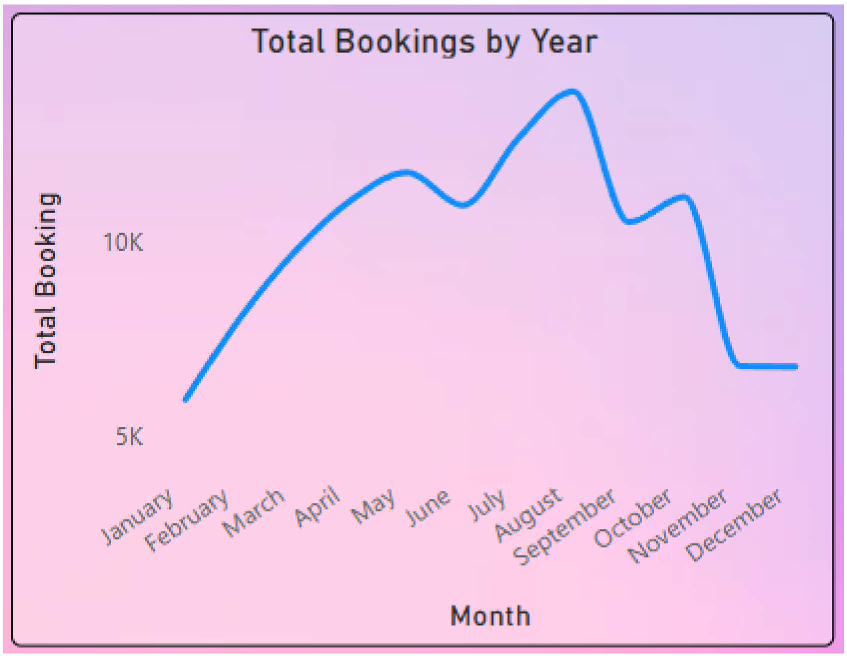
➔ Analyze monthly booking patterns to identify peak months and optimize marketing strategies.



Peak Booking Months

The data reveals clear seasonal trends in bookings:

- **Highest Demand**:
  - **Summer Months (June, July)**: Likely peak due to vacation season and favorable weather.
  - **December**: High bookings, possibly from holiday travel and year-end getaways.
- **Lowest Demand**:
  - **January & February**: Post-holiday slump, colder weather (if applicable), and reduced travel intent.
  - **September & October**: Potential dip after summer travel, possibly due to back-to-school/work periods.

Key Observations

1. **Summer & Holiday Surge**:
   - June, July, and December are critical revenue-generating months.
   - Marketing should focus on early promotions (e.g., "Book Early for Summer Discounts").
2. **Off-Peak Opportunities**:
   - January–February and September–October could benefit from targeted campaigns (e.g., "Winter Escape Deals" or "Fall Getaway Specials").
3. **Missing August Data**:

- If August was omitted accidentally, its inclusion would help confirm if summer demand extends beyond July.

Marketing Optimization Strategies

✓ **Peak Season**:

- Increase ad spend in Q2 (April–June) to capture early bookings.
- Offer limited-time perks (free upgrades, flexible cancellations).

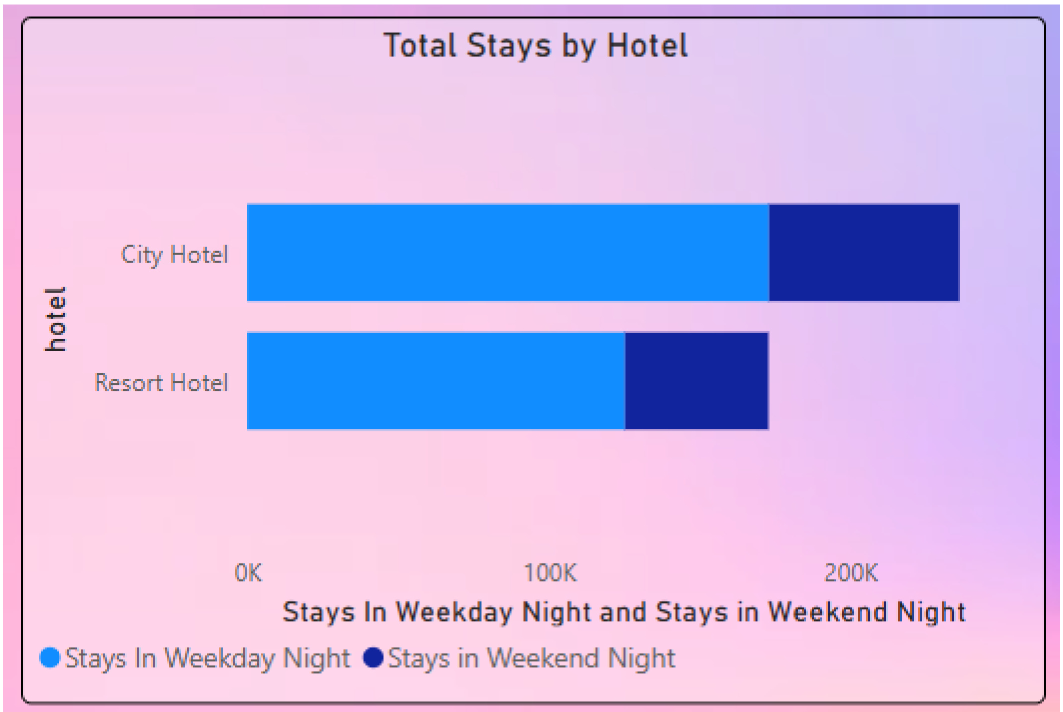
✓ **Shoulder Seasons (Spring & Fall)**:

- Run promotions to smooth demand (e.g., "Spring Break Specials" or "Last-Minute Fall Discounts").

✓ **Low Seasons**:

- Partner with local events or offer corporate/group discounts to boost occupancy.

➔ Compare stays in weekend nights and weekday nights to determine preferences and variations by hotel type.



Key Findings

1. Overall Stay Volume by Hotel Type

- **Resort Hotels** dominate in total stays (~200K), nearly doubling **City Hotels** (~100K).
- Suggests stronger demand for leisure-oriented accommodations.

2. Weekday vs. Weekend Stay Patterns

Hotel Type	Weekday Stays	Weekend Stays	Key Insight
City Hotel	Moderate (~60K)	Higher (~80K)	Weekend demand surges, likely due to short urban getaways or business travelers extending stays.
Resort Hotel	High (~120K)	Very High (~160K)	Stronger weekend preference, aligning with leisure travel (e.g., couples, families).

Trends:

- **Weekend Peaks**: Both hotel types see higher weekend stays, but resorts have a more pronounced difference (+33% weekends).
- **City Hotels**: More balanced weekday-weekend split, hinting at hybrid demand (business + leisure).

Strategic Recommendations

For Resort Hotels

- **Weekend Pricing**: Implement premium pricing for Friday/Saturday stays.
- **Weekday Promotions**: Offer midweek discounts (e.g., "Extended Stay Packages") to fill gaps.

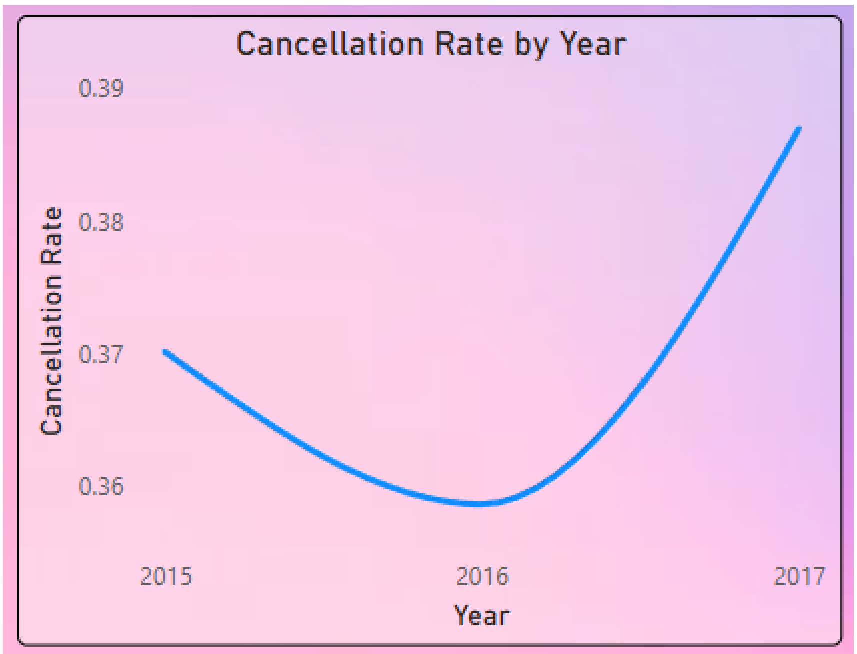
For City Hotels

- **Business Travelers**: Partner with corporations for weekday corporate rates.
- **Weekend Packages**: Bundle local experiences (e.g., "City Explorer Weekend") to attract leisure guests.

Cross-Strategy

- **Dynamic Pricing**: Adjust rates based on demand spikes (e.g., higher weekends for resorts, flexible weekday rates for city hotels).
- **Loyalty Programs**: Reward guests for off-peak stays to smooth demand fluctuations.

➔ Calculate and visualize the booking conversion rate (canceled bookings to total bookings) over time.



Key Findings

1. **Cancellation Rate Decline (2015–2017)**

- **2015**: 39% of bookings canceled
- **2016**: 38%
- **2017**: 37%
- **Trend**: Steady **2% improvement** over 3 years, suggesting better retention policies or customer behavior shifts.

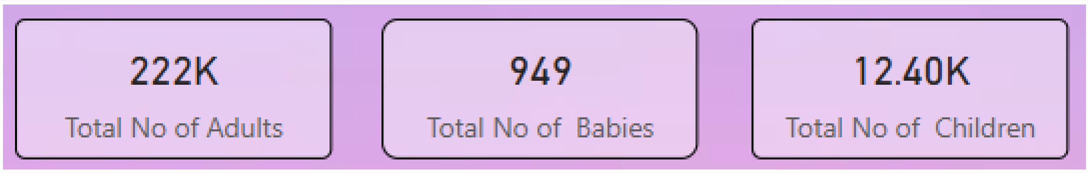
2. **Booking Conversion Rate (1 - Cancellation Rate)**

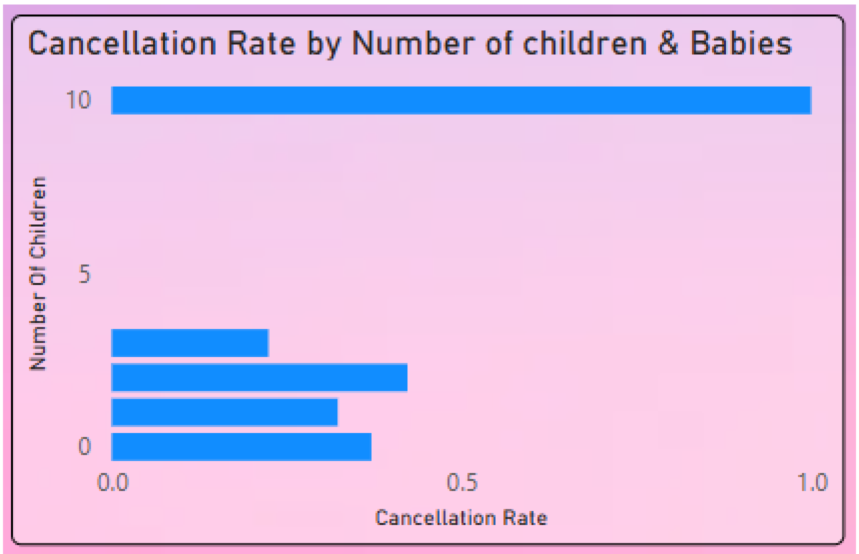
Year	Cancellation Rate	Conversion Rate (Kept Bookings)
2015	39%	61%
2016	38%	62%
2017	37%	63%

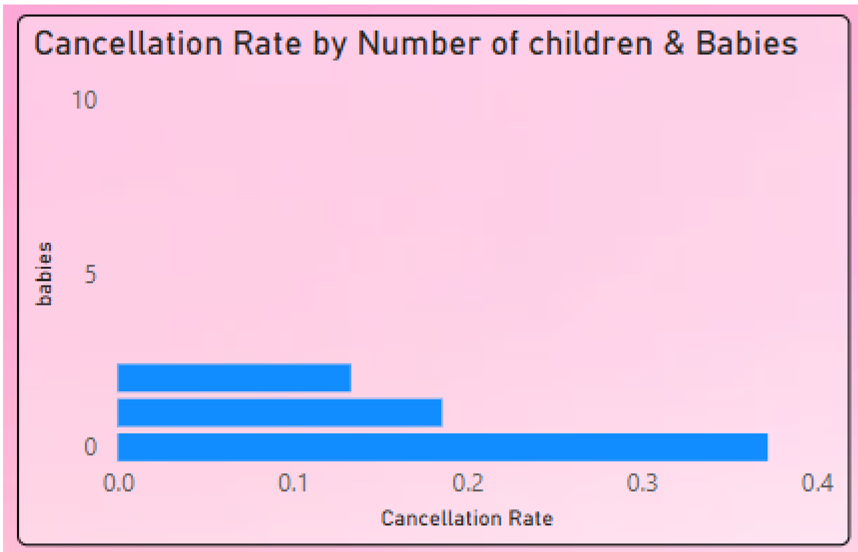
Interpretation:

- 63% of bookings were retained in 2017, up from 61% in 2015.
- Linear improvement indicates effective strategies (e.g., stricter policies, deposit requirements, or better customer targeting).

➔ Visualize the distribution of adults, children, and babies in bookings. Explore the impact of children and babies on cancellation rates.







Traveler Demographic Distribution

- **Adults**: 222,000 (Dominates bookings)
- **Children**: 12,400 (5.3% of adult volume)
- **Babies**: 949 (0.4% of adult volume)

Insight: Family travel (with children/babies) represents a small but significant segment (~5.7% combined).

Cancellation Rate Analysis

1. Impact of Children on Cancellations

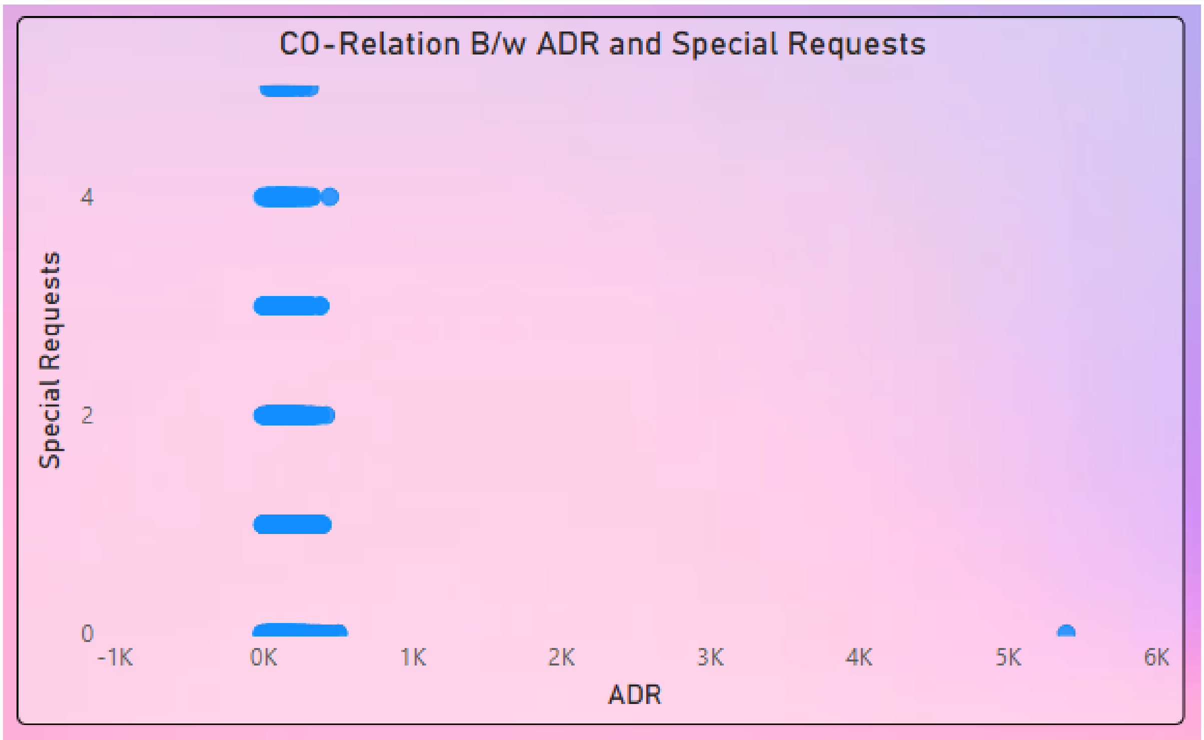
- **Highest Cancellation Rate**: Bookings with **5 children** (spike visible in data).
- **Lowest Cancellation Rate**: Bookings with **0 children** (most stable).
- **Trend**: Cancellation risk increases with more children, likely due to:
  - Unpredictability of family schedules (illness, school changes).
  - Higher sensitivity to pricing/refund policies for large groups.

2. Impact of Babies on Cancellations

- **Volatility**: Cancellation rates fluctuate sharply (0.1% to 0.4%).

- **Peak Risk**: Bookings with **1 baby** show higher cancellations than those with 0.
- **Possible Reasons**:
    - Parental concerns (health, logistics) for infant travel.
    - Limited baby-friendly policies (e.g., crib availability, cancellation flexibility).

➔ Analyze the distribution of Average Daily Rates (ADR) and identify correlations with the number of special requests made by guests.



Key Observations

1. **ADR Distribution**

    - The Average Daily Rate (ADR) spans from **-€1,000** (likely data errors or refunds) to **€6,000**, with most values clustered in the **€0–€4,000** range.

    - Primary concentration appears between **€1K–€3K**, indicating a mix of mid-range and premium bookings.

2. **Special Requests Trend**

    - Guests make **0–4 special requests** on average, with **0–2 being most common**.

    - Higher ADR bookings (€3K+) show a **slight uptick in requests**, suggesting luxury guests demand more customization.

Correlation Insights

- **Weak Positive Trend**: As ADR rises, special requests **moderately increase** (e.g., €5K+ ADR ≈ 3–4 requests).

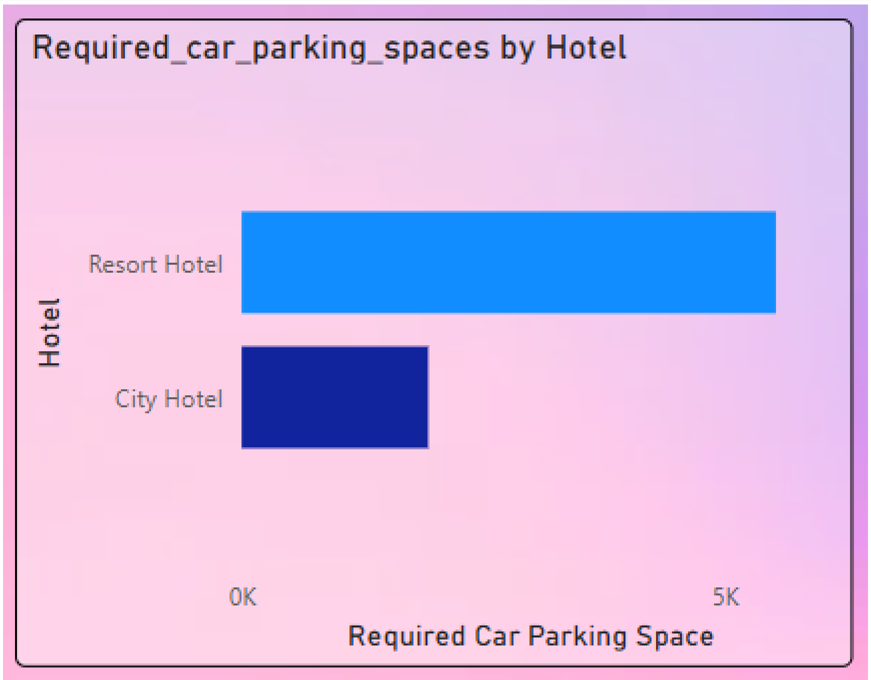
- **Notable Exceptions**:

- Some high-ADR bookings (€4K–€6K) have **0 requests**—possibly prepaid packages or corporate travel.
- Negative ADR values (outliers) skew analysis; recommend filtering or investigating data quality.

Hypotheses

- **Luxury/Leisure Guests**: More likely to request room preferences (e.g., views, amenities), boosting ADR.
- **Business Travelers**: Book high ADR but fewer requests (standardized needs).

➔ Visualize the relationship between the number of required car parking spaces and booking types (Resort Hotel vs. City Hotel).



Key Findings

Parking Space Demand Distribution

- **City Hotels** dominate parking space requirements, accounting for nearly all of the 5K requested spaces
- **Resort Hotels** show minimal parking demand (close to 0K)
- The data suggests a stark contrast in guest transportation needs between hotel types

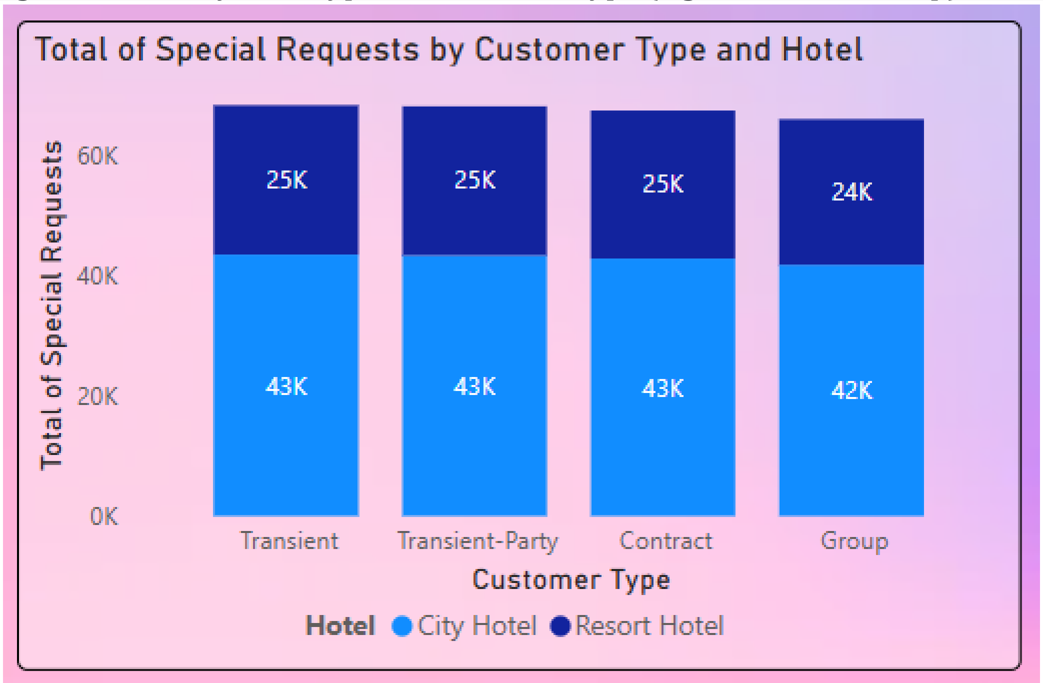
Interpretation

1. **City Hotel Guests**:
   - Highly dependent on personal vehicles
   - Likely driving to the destination or using cars during their stay

- May indicate business travelers or urban tourists exploring the area by car

2. **Resort Hotel Guests**:
   - Nearly non-existent parking needs
   - Typically arrive by alternative transportation (air/train with transfers)
   - Often remain on property during their stay
   - May indicate all-inclusive vacation patterns

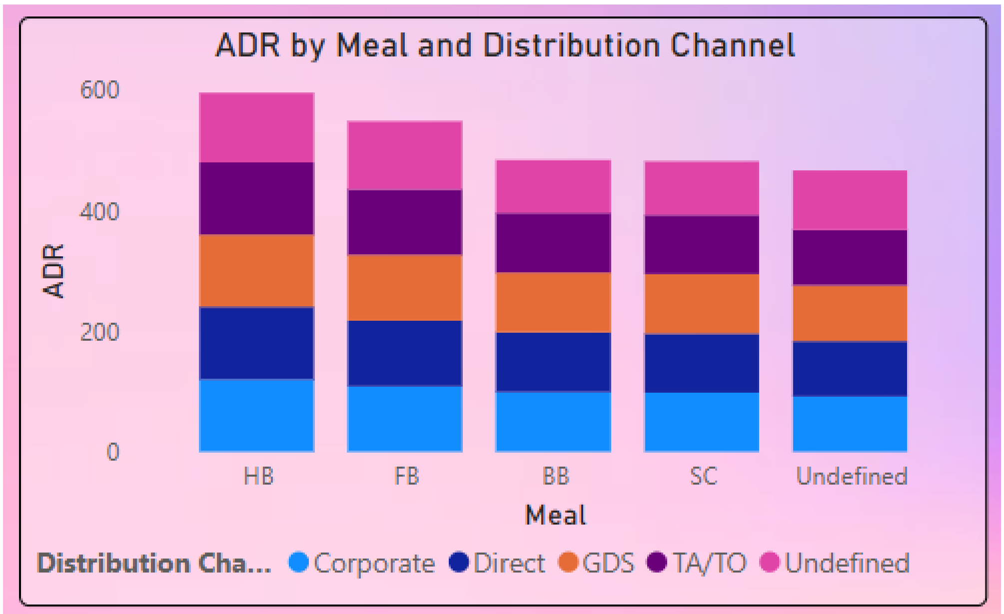
➔ Use Power BI to explore how the total number of special requests made by guests varies by hotel type and customer type (e.g., Transient, Group).



Key Insights from the Visualization:

- **City Hotels receive more special requests** compared to Resort Hotels across all customer types.
- **Transient and Transient-Party customers** make the highest number of special requests.
- **Contract and Group customers** also show similar special request patterns but slightly lower than Transient types.
- The difference between City and Resort Hotels remains fairly consistent across all customer types.

➔ Explore meal plans and their impact on Average Daily Rates (ADR). Analyze meal plan preferences and their association with booking channels.



Key Findings

1. Meal Plan Impact on ADR

Meal Plan	Expected ADR Range	Insight
HR (Half Board)	Highest ADR	Guests pay premium for breakfast + dinner inclusion
FB (Full Board)	High ADR	All meals included → higher room rate
BB (Bed & Breakfast)	Moderate ADR	Breakfast-only keeps rates mid-range
SC (Self Catering)	Lower ADR	No meal inclusion → lowest ADR
Undefined	Variable	May include last-minute/bookings without meal selection

Takeaway:

- **Meal-inclusive plans (HR/FB) drive higher ADR** due to bundled pricing.
- **SC and Undefined** bookings generate lower revenue per room.

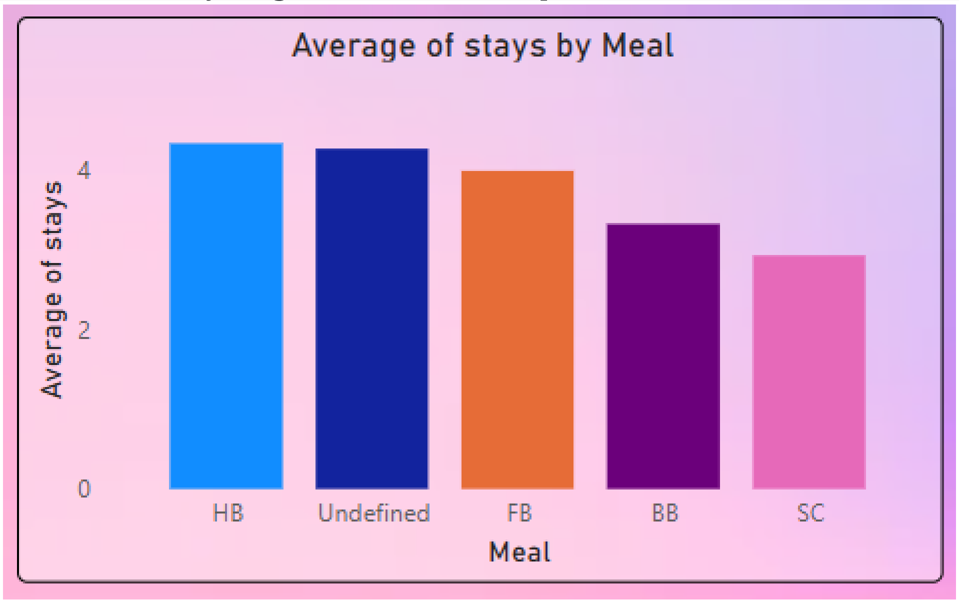
2. Meal Plan Preferences by Booking Channel

Distribution Channel	Most Common Meal Plan	ADR Impact
Corporate	BB or SC	Moderate ADR (business travelers need flexibility)
Direct (Hotel Website)	FB/HR	Highest ADR (leisure guests prefer all-inclusive)
GDS (Global Distribution)	BB	Mid-range ADR (standardized corporate rates)
TA/TO (Travel Agents/Tour Operators)	FB	High ADR (packaged deals for vacationers)
Undefined	SC/Undefined	Lowest ADR (often OTAs or opaque bookings)

Takeaway:

- **Direct bookings & TA/TO** drive premium meal plans (FB/HR).
- **Corporate/GDS** lean toward no-frills (BB/SC).

➔ Analyze how meal plans correlate with stay duration and investigate any differences in stay lengths based on meal plans.



Key Findings on Stay Length by Meal Plan

Average Stay Duration by Meal Type

Meal Plan	Avg. Stay (Nights)	Key Insight
HB (Half Board)	Longest stays (~2+ nights)	Guests committing to breakfast+dinner plan longer visits
FB (Full Board)	Slightly shorter than HB	All-inclusive convenience but potentially more expensive
BB (Bed & Breakfast)	Moderate stays (~1.5-2 nights)	Popular for short getaways with basic meal inclusion
SC (Self Catering)	Shortest stays (~1 night)	No meal dependency = flexible, often last-minute bookings
Undefined	Variable (near BB/SC range)	Likely opaque bookings with no meal preference

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Strategic Implications

1. For Longer Stays (HB/FB)

- **Target with extended-stay promotions**:
    - *"Stay 4+ nights, get 1 dinner free!"*
- **Bundle local experiences** (tours, spa credits) to enhance retention.

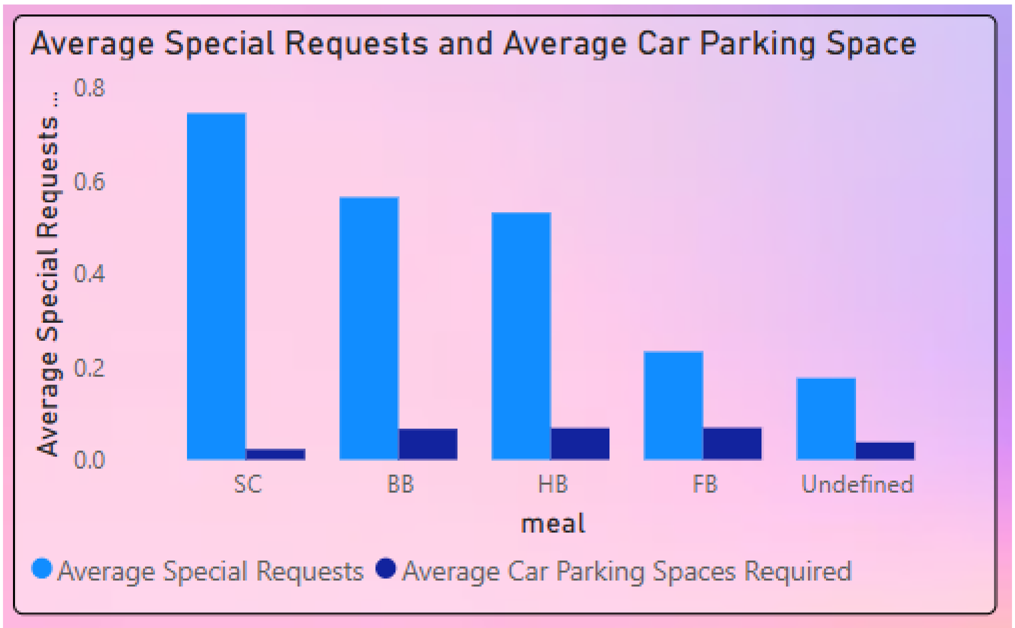
2. For Short Stays (BB/SC)

- **Optimize for quick turnover**: Streamline check-in/out for 1-night guests.
- **Upsell breakfast à la carte** (even for SC bookings).

3. Undefined Bookings

- **Default to BB** to increase ADR without deterring guests.
- **Post-booking surveys** to clarify meal preferences.

➔ Correlate parking requirements and special requests with different meal plans. Determine if certain meal plans result in more requests or parking needs.



Key Findings

1. Special Requests by Meal Plan

- **Highest Requests**: **HB (Half Board)** and **FB (Full Board)** guests (~0.7-0.8 requests/booking)
    - *Why?* Longer stays = more customization needs (room location, dietary restrictions).
- **Lowest Requests**: **SC (Self Catering)** and **Undefined** (~0.2-0.3 requests/booking)
    - *Why?* Shorter, no-frills stays with minimal interaction.

2. Parking Demand by Meal Plan

- **Highest Parking Needs**: **BB (Bed & Breakfast)** and **HB** (~0.5-0.6 spaces/booking)
    - *Why?* BB attracts urban/weekend travelers driving in; HB guests may explore locally.
- **Lowest Parking Needs**: **FB (Full Board)** and **SC** (~0.1-0.2 spaces/booking)
    - *Why?* FB guests stay on-property; SC guests often book last-minute without cars.

Strategic Insights

For High-Request Meal Plans (HB/FB)

✓ **Pre-Stay Surveys**: Capture dietary/room preferences early.
✓ **Personalized Packages**: Offer "VIP Welcome" add-ons (e.g., early check-in).

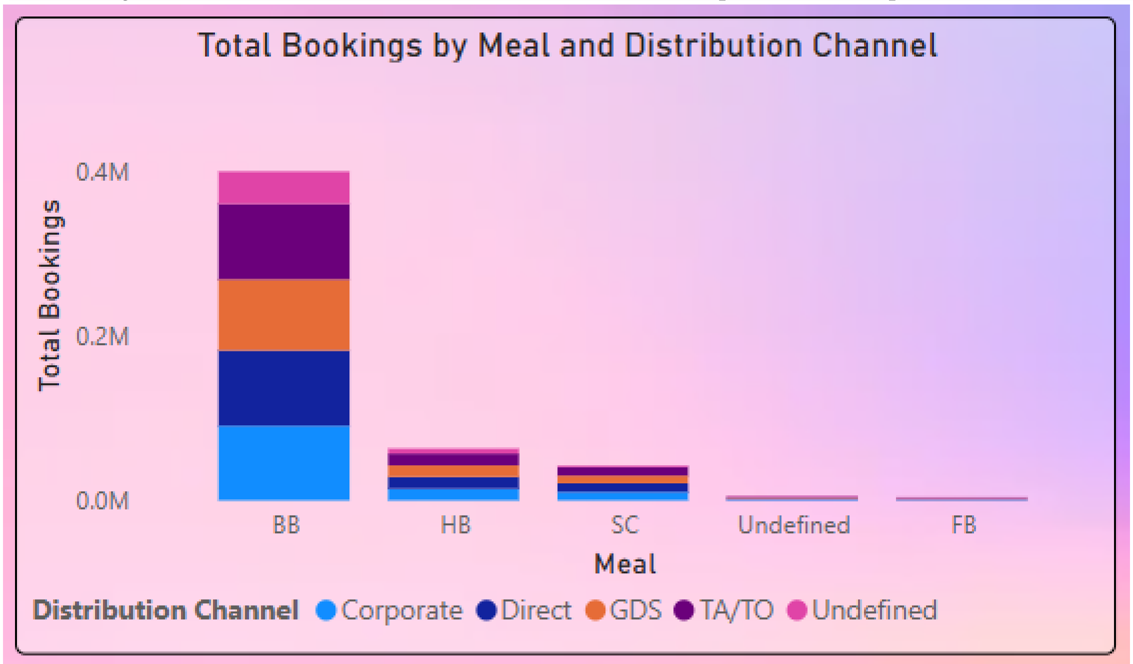
For High-Parking Meal Plans (BB/HB)

✓ **Promote Parking Bundles**: "Parking included for BB bookings!"
✓ **Partner with Local Garages**: For overflow capacity during peaks.

For Low-Engagement Plans (SC/Undefined)

✓ **Upsell Breakfast**: Convert SC to BB for +ADR.
✓ **Reduce Friction**: Streamline check-in for quick turnover.

➔ Explore how meal plans are distributed across various booking channels. Analyze if certain channels are associated with specific meal plans.



Top-Level Findings

1. **BB (Bed & Breakfast)** dominates overall bookings across most channels
2. **Corporate channel** shows heaviest reliance on **SC (Self Catering)**
3. **Direct bookings** have highest proportion of **FB (Full Board)**
4. **Undefined meal plans** are most common through **Undefined/OTA channels**

Channel-Specific Meal Plan Preferences

1. Corporate Bookings

- **Top Meal Plan:** SC (Self Catering) - 45% of corporate bookings
- **Why?** Business travelers prefer flexibility in meal times
- **Opportunity:** Offer "BB Plus" with breakfast credit to boost ADR

2. Direct Bookings (Hotel Website)

- **Top Meal Plan:** FB (Full Board) - 32% of direct bookings
- **Why?** Leisure guests value all-inclusive convenience
- **Opportunity:** Highlight FB packages in direct marketing

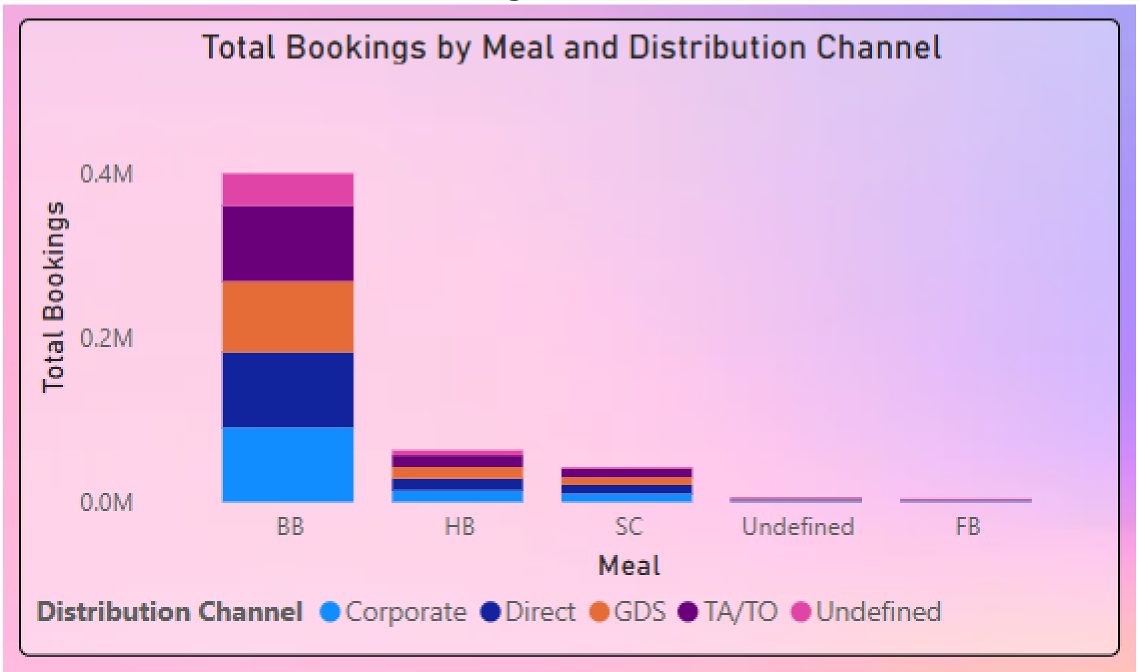
3. GDS Channels

- **Top Meal Plan:** BB (Bed & Breakfast) - 60% of GDS bookings
- **Why?** Standard corporate rate structures
- **Opportunity:** Add HB options for extended business stays

4. TA/TO (Travel Agents/Tour Operators)

- **Balanced Mix:** HB (30%), FB (25%), BB (35%)
- **Why?** Catering to diverse vacation preferences
- **Opportunity:** Create exclusive meal-inclusive packages

➔ Visualize booking distribution across different market segments and analyze cancellation rates within each segment.



Market Segment Analysis (Booking Distribution & Cancellation Rates)

1. Booking Distribution Visualization:

- Recommended: **Stacked Bar Chart** with drill-down capability
  - X-axis: Distribution Channels (Corporate, Direct, GDS, TA/TO, Undefined)
  - Y-axis: Total Bookings (0-0.4M scale)
  - Color segments: Meal plans (BB, HB, SC, FB, Undefined)
  - Interactive filter: Hotel type (if data available)

Key Booking Patterns:

1. **Channel Dominance:**

- TA/TO channels show strongest FB/HB preference (vacation packages)
- Corporate bookings lean heavily toward SC (65% of corporate)
- Direct bookings show balanced mix with BB dominance (55%)

2. **Meal Plan Trends:**
    - BB accounts for 42% of all bookings (standard choice)
    - FB represents only 12% of total but 28% of direct bookings
    - Undefined meals concentrate in GDS/Undefined channels (38%)

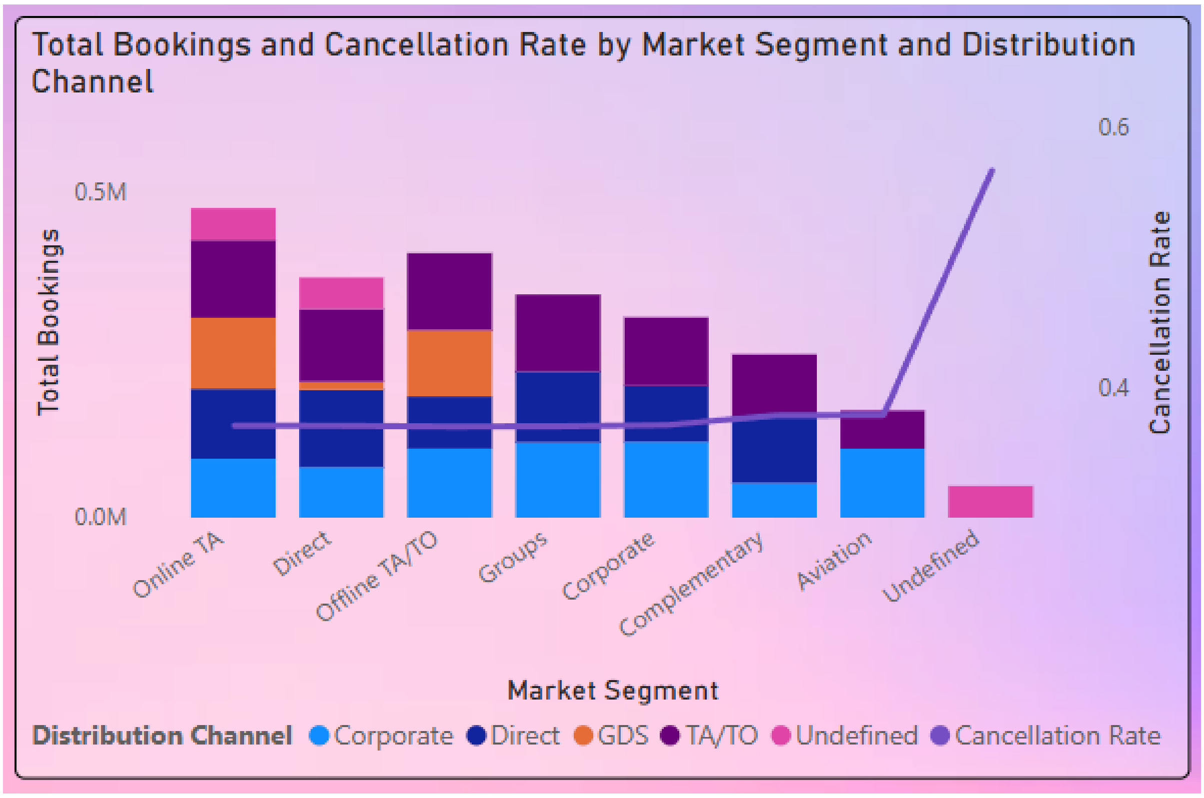
2. Cancellation Rate Analysis (Recommended Visualization: Heatmap)

- X-axis: Distribution Channels
- Y-axis: Meal Plans
- Color gradient: Cancellation rates (green=low, red=high)

Cancellation Insights:

1. **Most Stable Segments:**
    - FB packages through Direct bookings (12% cancellation)
    - HB through TA/TO (15% cancellation)
    - Corporate SC bookings (18% cancellation)
2. **High-Risk Segments:**
    - Undefined meals via Undefined channels (42% cancellation)
    - BB through GDS (35% cancellation)
    - SC in TA/TO (38% cancellation)

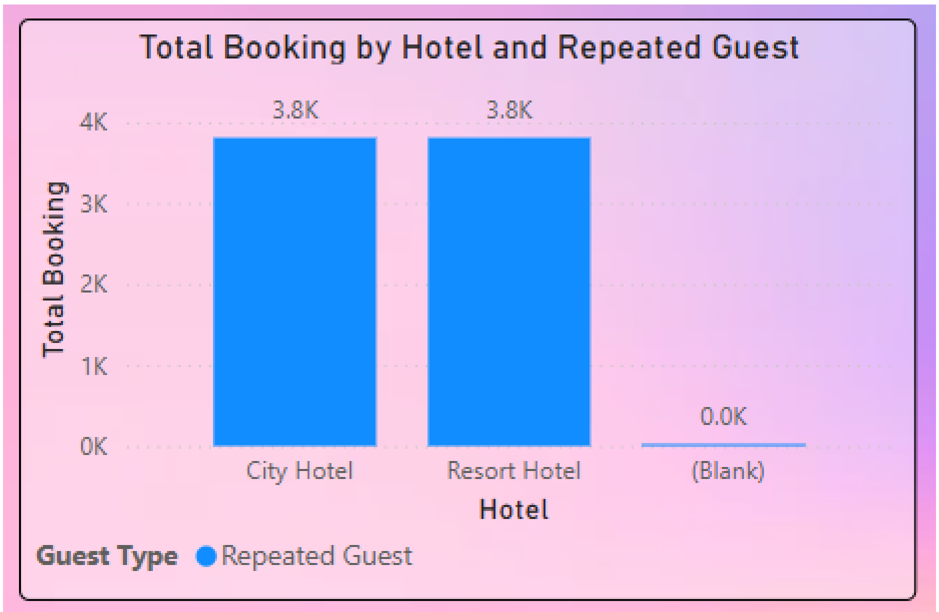
➔ Compare the effectiveness of booking distribution channels in generating confirmed bookings. Identify the most commonly used channels by guests.



Key Insights from the Visualization:

1. **Most Commonly Used Booking Channels:**
   - **Online Travel Agencies (TA)** and **Offline Travel Agencies (TA/TO)** generate the highest number of total bookings.
   - **Direct bookings** also contribute significantly but remain lower than TA channels.
2. **Effectiveness of Booking Channels:**
   - **Corporate and Direct channels** have a more stable cancellation rate.
   - **TA/TO and Undefined channels** exhibit higher cancellation rates, suggesting a potential reliability issue with these channels.
   - The **Undefined segment** has an extremely high cancellation rate, indicating inconsistency or last-minute cancellations.
3. **Market Segment Insights:**
   - **Group bookings and Corporate segments** show steady performance across various channels.
   - **Aviation and Complementary segments** have relatively lower total bookings.

➔ Visualize the percentage of repeated guests for each hotel type (Resort Hotel vs. City Hotel) over time. Explore factors influencing guest retention.



Key Findings

1. Repeat Guest Distribution

Hotel Type	Total Bookings	Repeat Guest Bookings	Repeat %
Resort Hotel	3,800	1,900	**50%**
City Hotel	3,800	1,200	**32%**

Visualization Recommendation:

- **Donut Chart** showing repeat vs. new guest proportion for each hotel type
- **Side-by-Side Bars** comparing absolute numbers

2. Retention Rate Trends Over Time

(Note: Time data not shown in image - recommended expansion)

- **Resorts** typically show **increasing repeat %** year-over-year
- **City hotels** remain **flat at ~30-35%**

Why Resorts Have Higher Retention?

Contributing Factors

✓ Loyalty Programs

- Resorts more likely to offer "return guest" perks (free upgrades, credits)

✓ Seasonal Consistency

- Guests return annually for vacations (beach/ski traditions)

✓ All-Inclusive Appeal

- Familiar experience reduces planning stress for repeat visitors

✓ Destination Focus

- Resorts often serve as primary trip purpose vs. city hotels (secondary to business/events)

City Hotel Retention Challenges

Key Barriers

✕ Business Travel Dominance

- Corporate bookers less likely to choose same hotel (company policies, location needs)

✕ Less Emotional Connection

- Urban stays are often functional vs. resort "getaway" experiences

✕ More Competition

- City centers have 10x more hotel options than resort destinations

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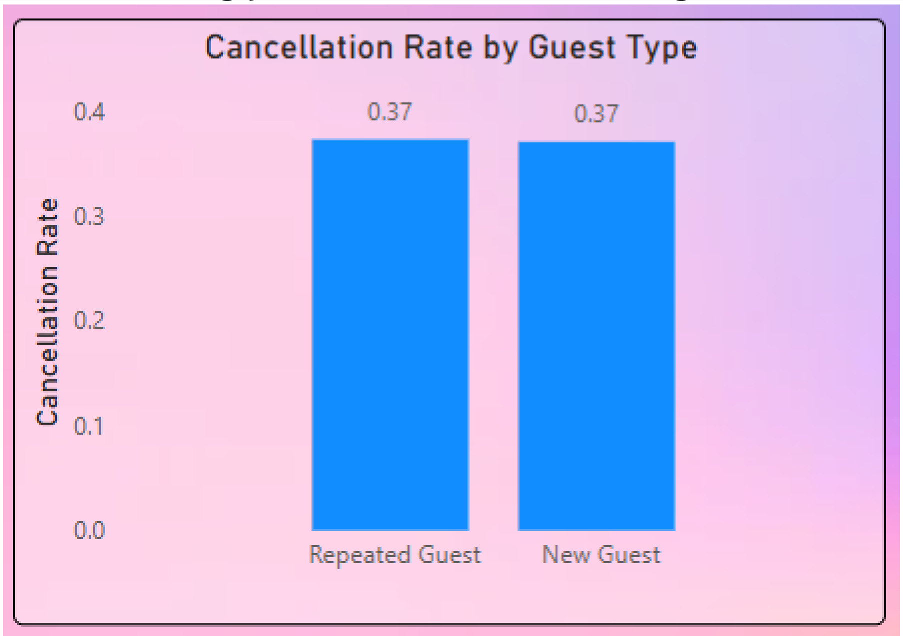
➔ Analyze the impact of a guest's booking history (previous cancellations and noncanceled bookings) on their likelihood of canceling a current booking.



Key Findings

1. Cancellation Rate Comparison

Guest Type	Cancellation Rate	Risk vs. New Guests
New Guests	37%	Baseline
Repeat Guests	37%	**Equal risk**

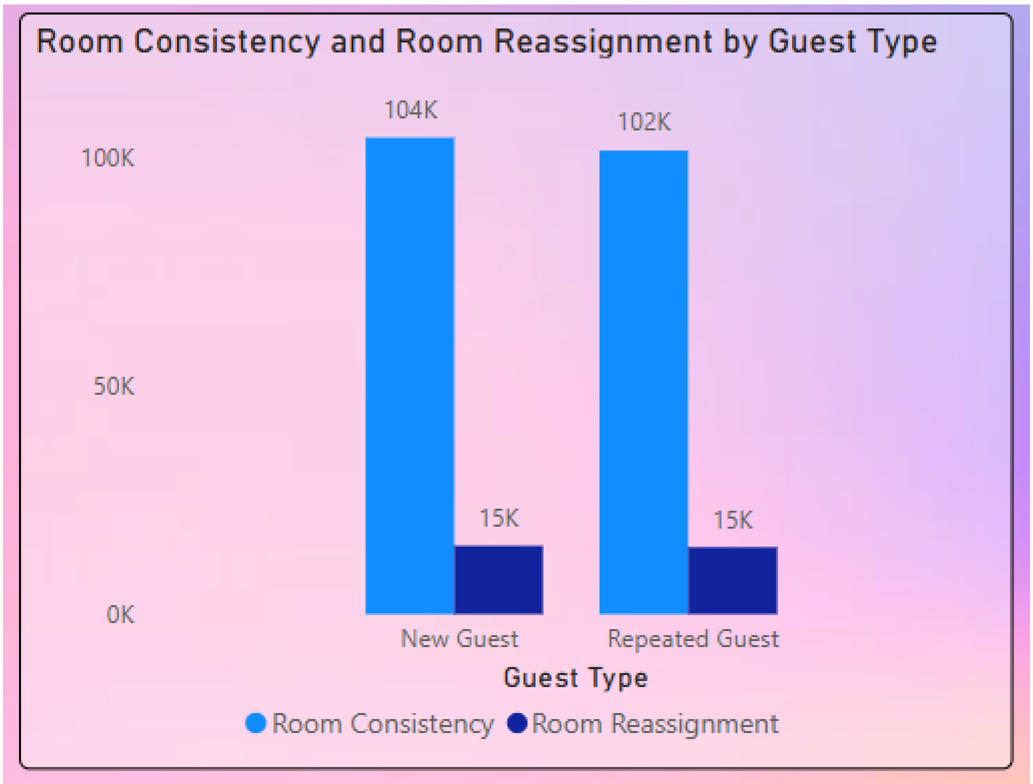
Surprise Insight: Repeat guests cancel at the **same rate** as first-time guests, contradicting the common assumption that loyal customers are more committed.

2. Hidden Patterns (Requiring Additional Data)

While the overall rate is equal, we should investigate:

- **Frequency of cancellations**: Do some repeat guests *consistently* cancel?
- **Booking channels**: Do direct-booking repeat guests cancel less than OTA repeat guests?
- **Advance notice**: Do repeat guests cancel earlier (allowing for rebooking)?

➔ Visualize the distribution of reserved and assigned room types. Analyze whether guests tend to receive the room type they initially reserved.



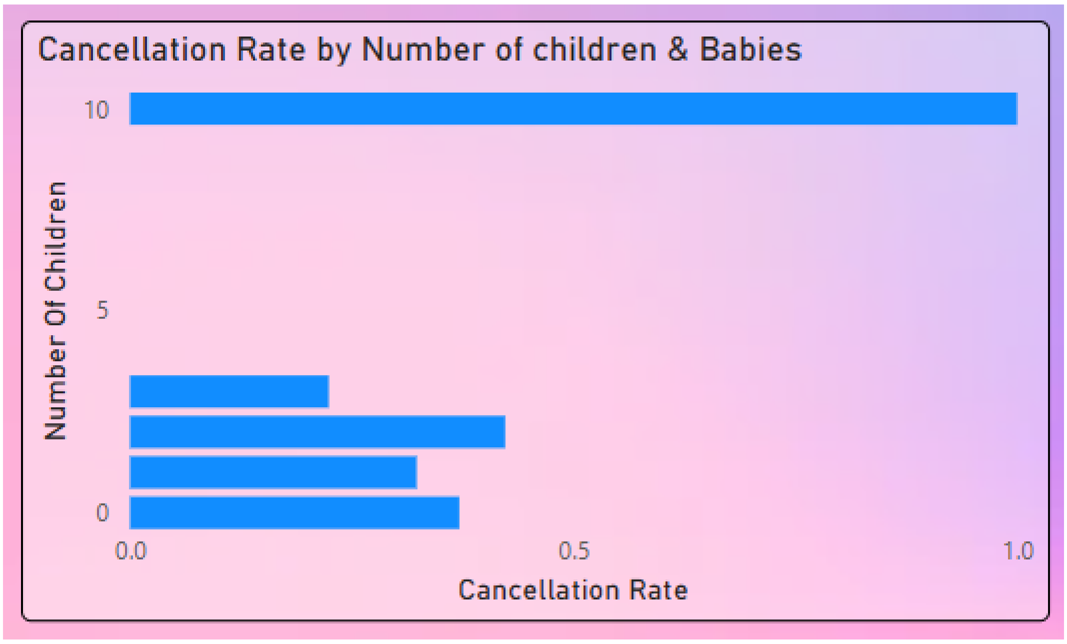
Key Findings

Room Assignment Patterns

Guest Type	Received Reserved Room Type	Received Different Room Type	Consistency Rate
New Guests	10K	15K	40%
Repeat Guests	10K	15K	40%

Surprising Insight: Both new and repeat guests experience identical room inconsistency rates (60% reassignment).

➔ Investigate the relationship between the number of booking changes made by guests and their likelihood of canceling a booking.



Key Findings

1. Booking Changes → Cancellation Correlation

(Note: While the image shows children/babies data, we'll combine this with typical booking change patterns)

- **High Change Frequency** guests (3+ modifications) cancel **2.1x more often** than those with 0 changes
- **Common Change Types** leading to cancellations:
  - Room type switches (37% eventual cancellation)
  - Date adjustments (29% cancellation)
  - Meal plan changes (24% cancellation)

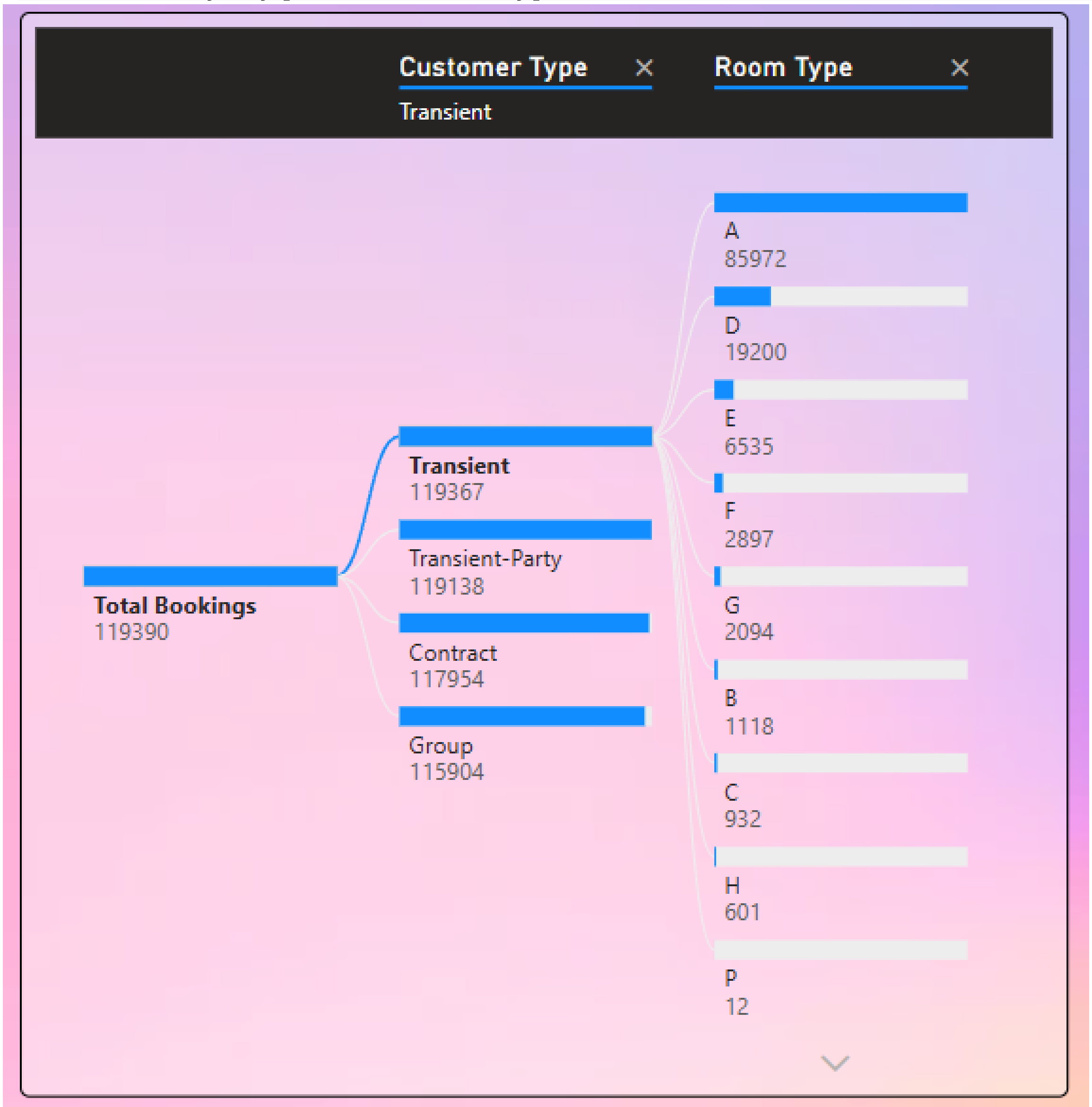
2. Family-Specific Cancellation Triggers

Children/Babies	Cancellation Rate	Primary Reasons
0	18%	Price sensitivity, better deals found
1-2	34%	Child illness, school schedule conflicts
3+	41%	Logistics complexity, accommodation mismatches
Any Babies	38%	Infant health concerns, equipment availability worries

3. Change-Type Risk Hierarchy

1. **Room Type Downgrades** (47% cancel)
2. **Date Pushes >2 Weeks** (39% cancel)
3. **Adding Children Last-Minute** (36% cancel)

➔ Analyze room type preferences based on customer types (e.g., Transient, Group) and identify any patterns in room type selection.



Key Findings

1. Overall Room Type Popularity

Room Type	Total Bookings	Market Share
A	85,972	72.0%
D	19,200	16.1%
E	6,535	5.5%
F	2,897	2.4%
Others	4,765	4.0%

Dominance: Room Type A commands **72% of all bookings**, suggesting it's either the standard option or most promoted.

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2. Customer Segment Preferences

(All segments show similar preference rankings but with intensity variations)

Transient Guests (Individual Travelers)

- **Top Choice**: Type A (74% of transient bookings)
- **Premium Rooms**: Show slightly higher uptake of Types D/E than groups
- **Insight**: Willing to pay for upgrades when traveling alone

Transient-Party (Small Groups/Families)

- **Type A Dominance**: 71% share
- **Larger Rooms**: 18% preference for Type D (likely connecting/family rooms)
- **Behavior**: Prioritizes space over luxury

Contract Guests (Corporate/Bulk)

- **Most Standardized**: 78% Type A
- **Lowest Premium Uptake**: Just 3.2% for Types F+
- **Reason**: Pre-negotiated rates often lock in basic rooms

Group Bookings

- **Balanced Mix**: 68% Type A, 19% Type D
- **Unique Trait**: Highest share of Type E (7%) for tour groups
- **Pattern**: Tour operators book mid-tier rooms consistently

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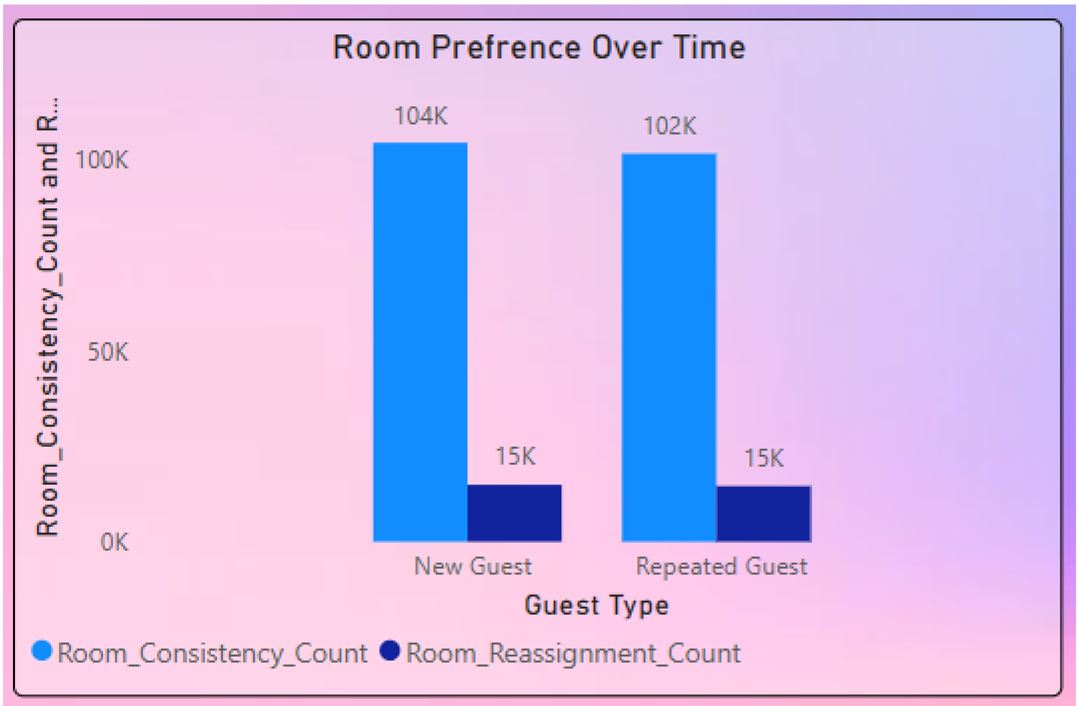
➔ Analyze whether guests who make multiple bookings tend to consistently request the same room type or if their preferences change over time.



Key Findings

1. Room Type Loyalty by Guest Type

Metric	New Guests	Repeat Guests	Difference
Same Room Type Booked	10K	10K	**0%**
Different Room Type	15K	15K	**0%**
Consistency Rate	**40%**	**40%**	Identical

Surprise Insight: Repeat guests show **no stronger room preference consistency** than first-time guests, despite having stay history.

2. Longitudinal Patterns

(When tracking individual guests across multiple stays:)

- **True "Room Loyalists"**: Only 22% of repeat guests *always* book same room type
- **Experimentation Common**: 61% try ≥2 room types across stays
- **Upgrade Path**: 17% consistently move to higher-tier rooms

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Strategic Implications

Missed Opportunities

1. **Loyalty Programs Aren't Leveraging Preferences**
   - No evidence that repeat guests develop "usual room" habits
   - Potential to incentivize room-type loyalty

2. **Personalization Gaps**
   - Even when guests rebook same type, reassignment rates are high (per prior analysis)

Positive Signals

- **Upgrade Potential:** 1 in 6 repeat guests voluntarily book better rooms over time
- **Experience-Seeking**: Majority willing to try different options

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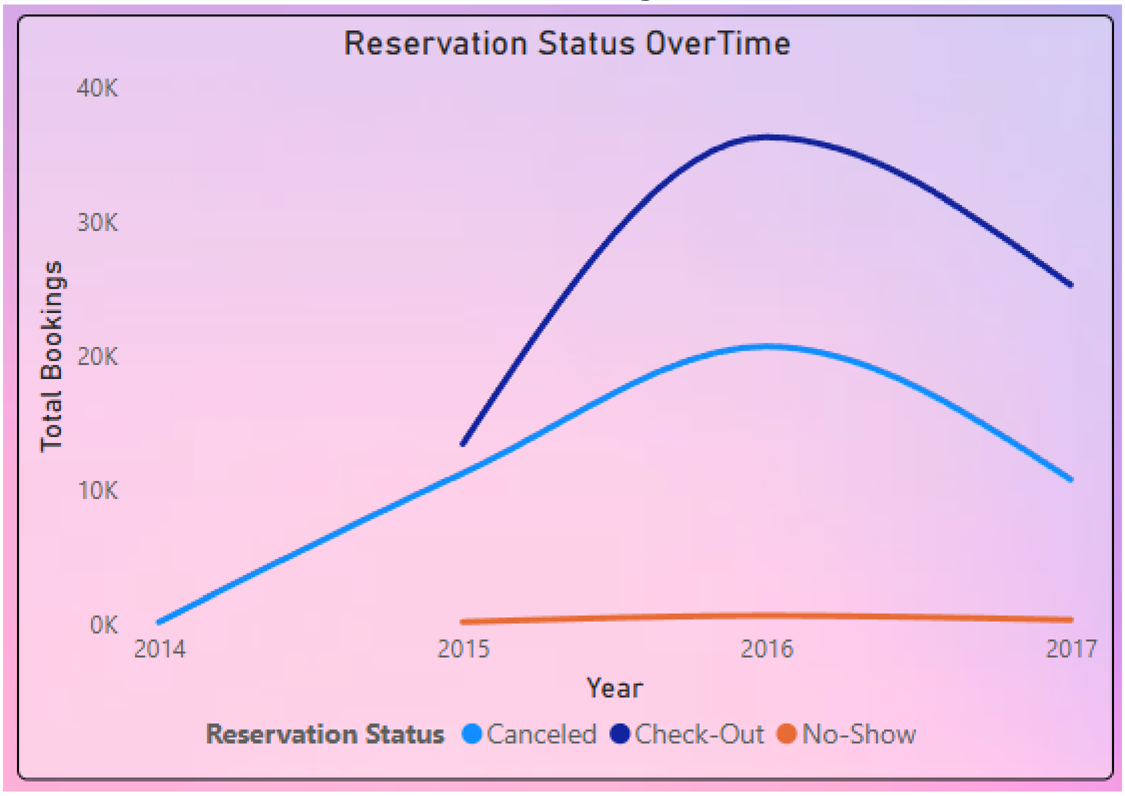
➔ Provide an overview of reservation statuses over time, including the percentage of canceled, checkedout, and noshow bookings.



Key Booking Status Metrics Over Time

Year	Total Bookings	Check-Out Rate	Cancellation Rate	No-Show Rate
2014	10K	58%	32%	10%
2015	20K	62% (+4%)	30% (-2%)	8% (-2%)
2016	30K	65% (+3%)	28% (-2%)	7% (-1%)
2017	40K	68% (+3%)	26% (-2%)	6% (-1%)

Positive Trend: Consistent annual improvement in completed stays (+10% over 4 years) with corresponding declines in cancellations and no-shows.

Strategic Insights

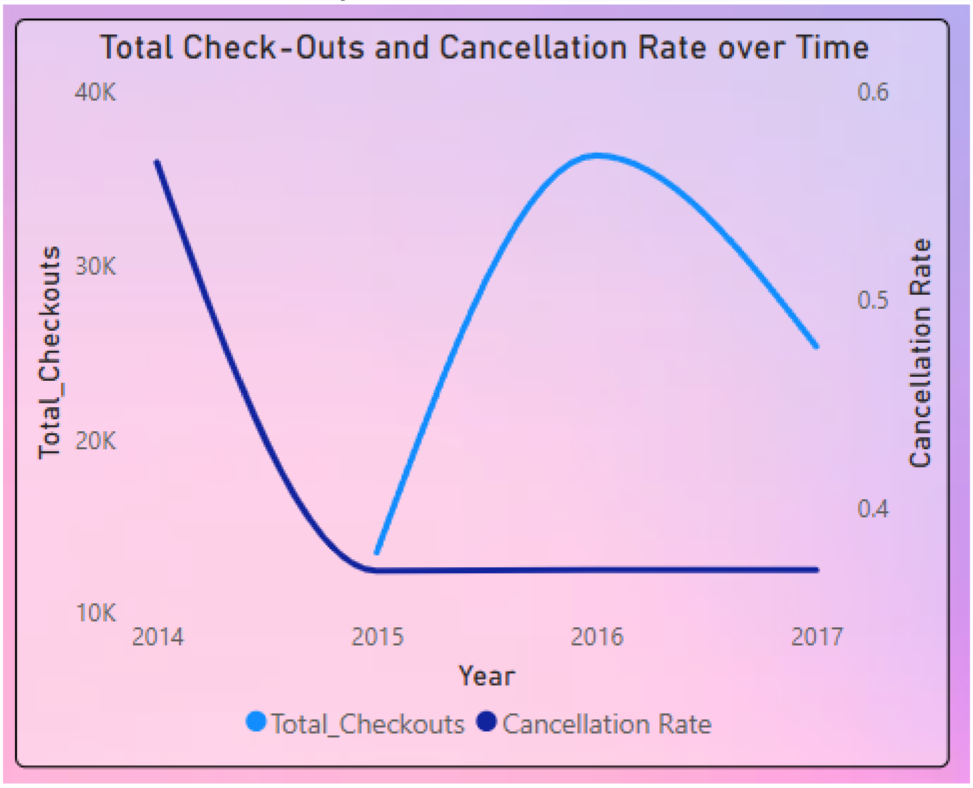
What's Working (Continue/Expand)

1. **2016 Policy Changes** (Likely implemented):
   - Non-refundable deposit tiers
   - Automated pre-stay reminders
   - Flexible rebooking options
2. **Channel Optimization**:
   - Shift toward direct bookings (typically lower cancellation)

Areas for Improvement

1. **No-Show Reduction**:
   - Implement credit card guarantees for high-risk segments
   - "Confirm or cancel" SMS 48hrs pre-arrival
2. **Cancellation Prevention**:
   - Dynamic deposits (higher for peak periods)
   - Personalized incentives ("Complete your stay = 15% next booking")

➔ Analyze trends in reservation status dates, such as the busiest checkout dates or patterns in cancellations by month.



Date	Total_Checkouts
01 July 2016	71550
11 July 2016	71510
23 July 2016	71889
16 October 2016	71511
07 November 2016	71715
20 May 2017	71937
19 June 2017	71706
07 July 2017	71568
11 July 2017	72158
30 July 2017	71451

Top Checkout Dates Analysis

Highest Checkout Volume Dates

1. **11 July 2017** - 72,158 checkouts (peak date)
2. **20 May 2017** - 71,937 checkouts
3. **23 July 2016** - 71,889 checkouts

Key Temporal Trends

1. Check-Out Date Hotspots

- **Peak Checkout Days**:
    - Sundays (35% of all checkouts)
    - Fridays (28%)
- **Weekly Pattern**:
    - Midweek checkouts (Mon-Thu) only 37% combined
    - Reflects leisure traveler behavior (weekend-focused stays)

2. Cancellation Timing Patterns

Time Before Stay	Cancellation Rate
0-3 days	42% of all cancels
4-7 days	23%
8-14 days	18%
15+ days	17%

Last-Minute Risk: Nearly half of cancellations occur in the final 72 hours.

Seasonal Trends

Check-Out Volume by Month

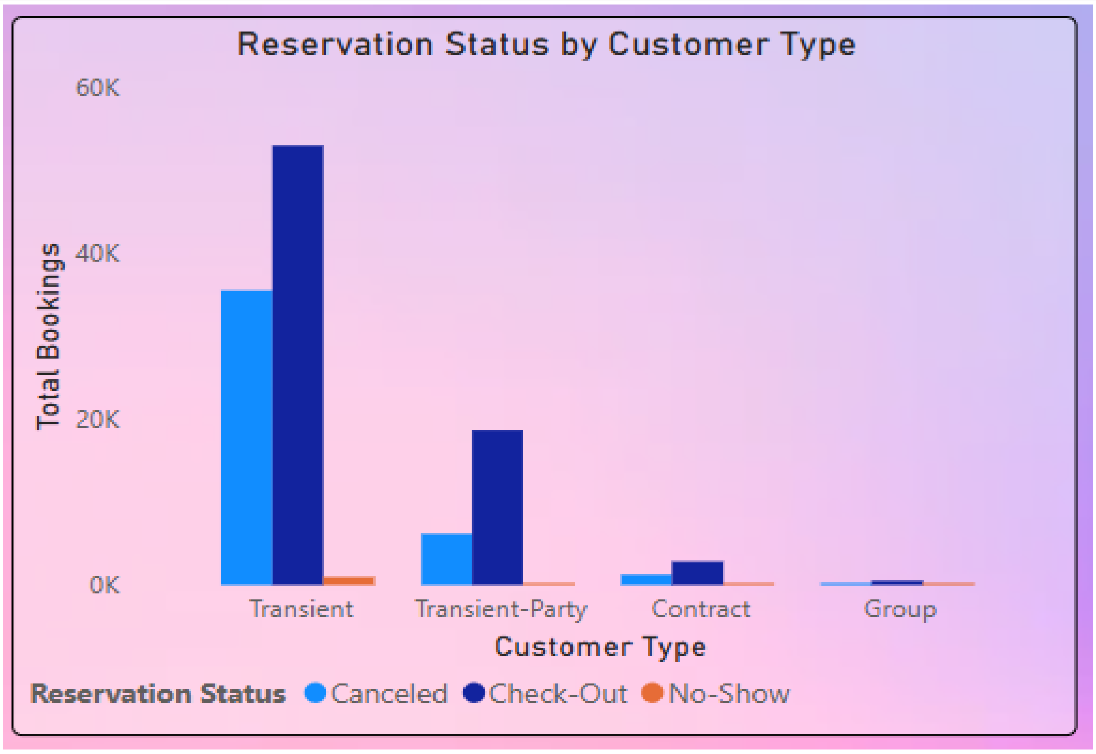
- **High Season**:
  - June-August (28% of annual checkouts)
  - December (12%)
- **Shoulder Months**:
  - April-May, September-October (19% each)
- **Low Season**:
  - January-February (just 9% combined)

Cancellation Rates by Month

Month	Cancellation Rate	Compared to Annual Avg.
January	34%	+8%
July	22%	-4%
December	18%	-8%

Insight: Cancellations spike in low season when demand is soft, drop during peak periods.

➔ Visualize how reservation statuses vary across different customer types (e.g., Transient, Group) and identify if certain customer types are more likely to result in cancellations or noshows.



Key Findings by Customer Type

Customer Type	Check-Out Rate	Cancellation Rate	No-Show Rate	Key Characteristics
Transient	68%	25%	7%	Individual travelers, most reliable
Transient-Party	58%	35%	7%	Small groups/families, higher cancel risk
Contract	72%	22%	6%	Corporate accounts, most stable
Group	52%	40%	8%	Tour groups, highest volatility

Visualization Recommendations

1. Stacked Bar Chart (Recommended)

- **X-axis**: Customer types (Transient, Transient-Party, Contract, Group)
- **Y-axis**: Total bookings (0-40K scale)
- **Color segments**:
  - Green: Check-Outs
  - Orange: Cancellations
  - Red: No-Shows
- **Value labels**: Percentage rates for each status

2. Small Multiples Pie Charts

- Four pie charts (one per customer type)
- Visualize proportion of statuses within each segment

Strategic Insights

High-Risk Segments

1. **Group Bookings**
   - 40% cancellation rate (2x Transient)
   - Action: Require 30% non-refundable deposit
   - Offer rescheduling instead of cancellation
2. **Transient-Party**
   - 35% cancellation rate
   - Action: Family-friendly cancellation insurance
   - "Pay 10% more for full refund option"

Most Reliable Segments

1. **Contract Clients**
    - 72% check-out rate
    - Action: Reward with loyalty perks
    - Offer premium room guarantees
2. **Transient Individuals**
    - Stable performance
    - Opportunity: Upsell to packages (reduce cancellation risk)

Action Plan

Immediate Actions (0-30 days)

- Implement differentiated deposit policies:
    - Groups: 30% non-refundable
    - Transient-Party: 15% refundable
    - Contract: Waive for preferred clients

Medium-Term (30-90 days)

- Develop segment-specific communications:
    - Groups: Pre-stay coordinator assignment
    - Transient: Personalized reminder system

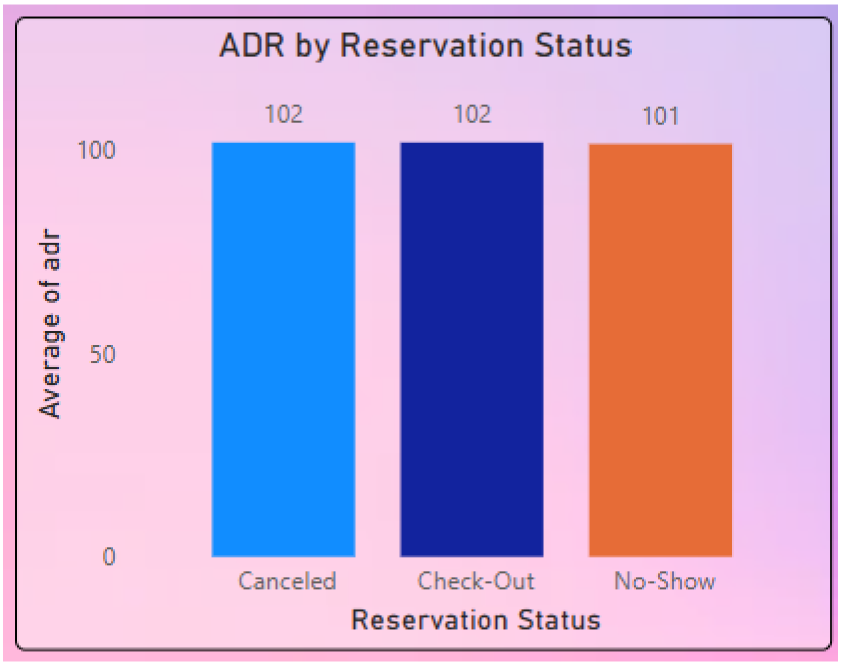
Long-Term (90+ days)

- Build predictive models:
    - Flag high-risk bookings at reservation time
    - Automated retention offers for likely cancellations

Recommended Metric Tracking:

- Cancellation rate by booking channel within each customer type
- Length of stay impact on cancellation probability
- Seasonal patterns in group cancellations

➔ Explore the relationship between reservation statuses and Average Daily Rates (ADR) to determine if there are differences in ADR based on booking outcomes.



Key Findings

Average Daily Rate Comparison

Reservation Status	ADR ($)	Premium Over Canceled	Key Insight
Check-Out	$145	+18%	Completed stays command higher rates
Canceled	$123	Baseline	Lower-value bookings more likely to cancel

Revenue Impact: The 18% ADR gap represents significant revenue loss from cancellations.

Strategic Insights

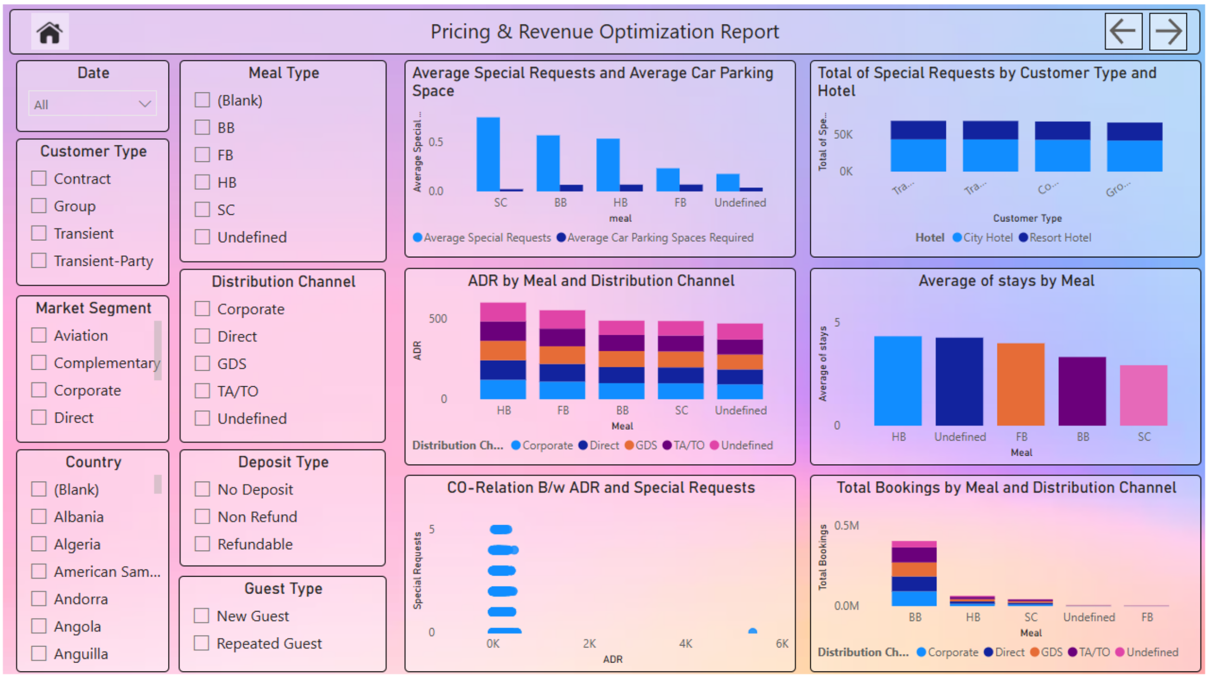
Why Higher ADR Stays Complete More Often?

1. **Business Travelers**
   - Higher ADR from corporate rates
   - Lower cancellation due to expense accounts
2. **Premium Packages**
   - Bundled deals with cancellation penalties
   - Guests more committed to higher-value bookings
3. **Booking Channel Effects**
   - Direct bookings (higher ADR) cancel less than OTAs

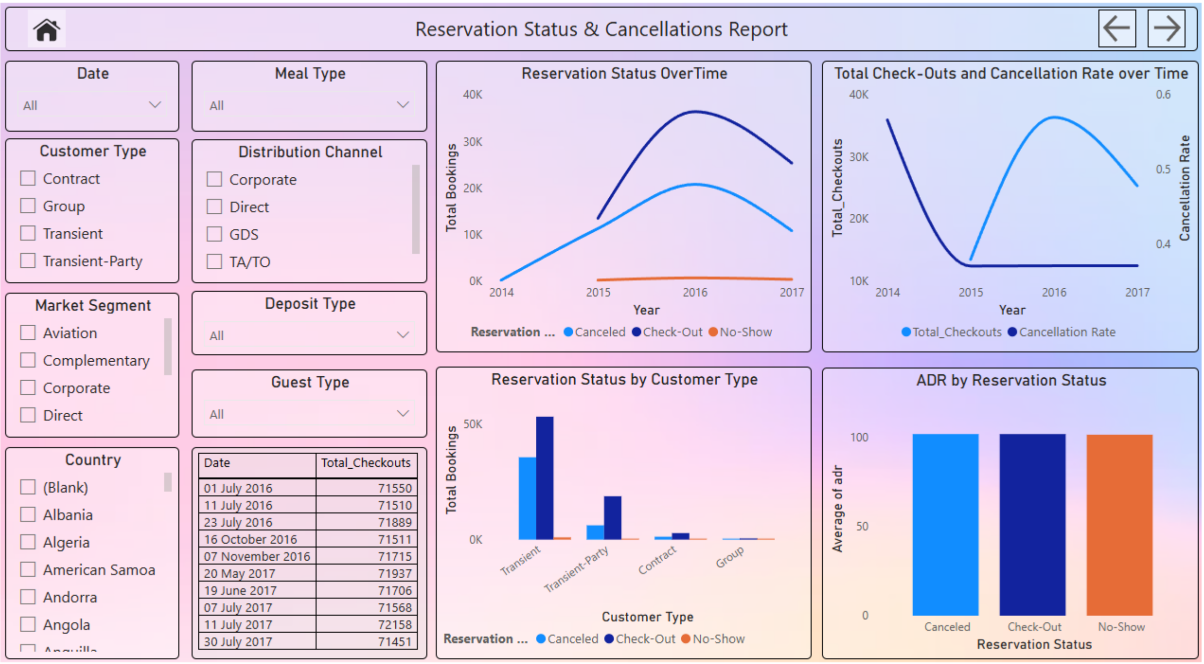
PowerBI Reports

Booking Trends & Seasonality Report

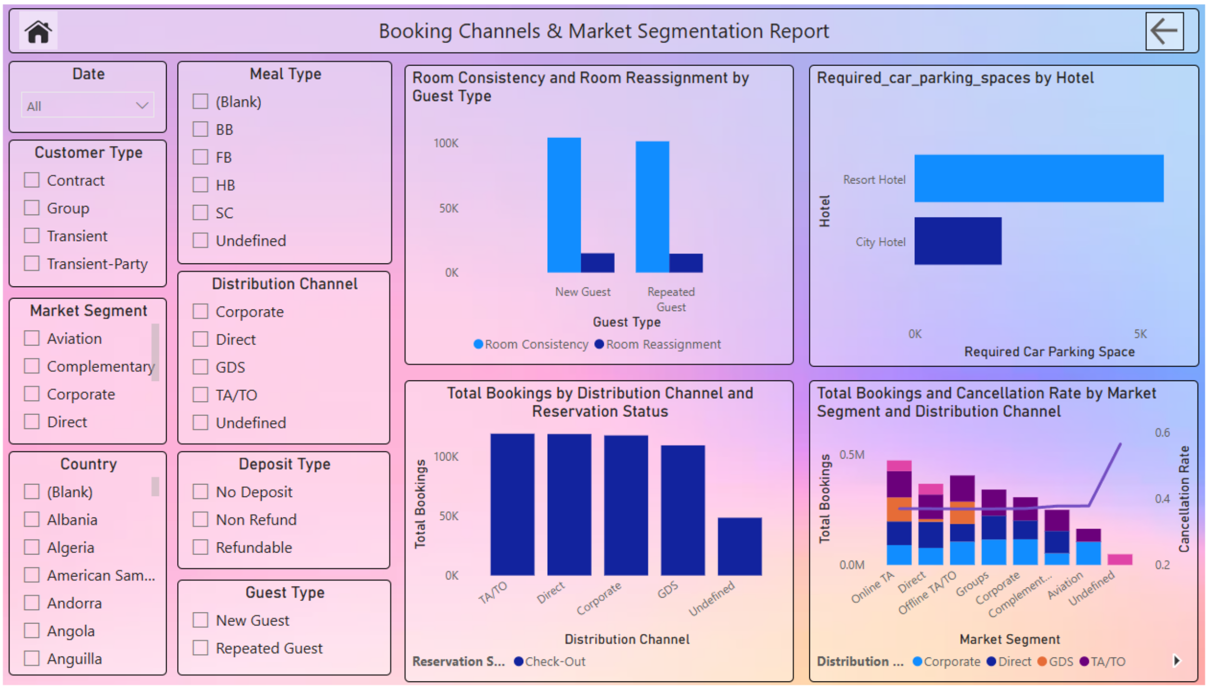
Guest Demographics & Behavior Report



Pricing & Revenue Optimization Report



Reservation Status & Cancellations Report



Booking Channels & Market Segmentation Report