

# Root Cause Analysis of Airbnb

## Problem

For the past few months, Airbnb has seen a major decline in revenue. Now that the restrictions have started lifting and people have started to travel more, Airbnb wants to make sure that it is fully prepared for this change.

## Clarifying Questions to Ask the Interviewee:

1. Is the decline in revenue due to specific neighbourhoods or particular types of neighbourhoods?
2. Has there been a recent decrease in the number of active users?
3. Have there been any recent changes to the website or app interface that may have negatively impacted user experience?
4. Has there been a decline in new user sign-ups on the app or website?
5. Is this issue occurring more frequently on desktop, mobile, the website, or the app?
6. Are there any known technical errors or bugs on the platform?
7. Are the most frequently booked property types consistently available throughout the year?
8. Are hosts frequently pausing or delisting their properties?
9. Is the issue more prevalent among a specific type of host (e.g., individual, small, or large hosts)?
10. Has there been a decline in bookings in high-engagement or high-traffic areas?
11. Are poorly reviewed listings still being promoted in search results?

12. Have there been any recent changes in pricing strategies by hosts?

13. Have minimum night requirements increased across listings?

That's how we can ask more clarifying questions to clarify the problem from the closer

## 5W + 1How Analysis:

### 1. What

#### **What is the problem?**

A noticeable decline in bookings and overall revenue, potentially caused by a drop in user engagement, host performance, or technical/product issues on the platform.

### 2. Why

#### **Why might this be happening?**

- Poor user experience in booking flow (confusing filters, slow load times).
- Limited availability of mid-range, high-demand listings.
- Declining trust due to low-quality listings or inaccurate property details.
- Technical bugs in the app or website (e.g., payment failures, search errors).
- Unclear pricing, cancellation policies, or host response issues.
- Outdated or non-personalized recommendations and poor search relevance.

**Answer:** Maybe because of low availability

### 3. When

**When did the problem start to become noticeable?**

- Post-pandemic travel rebound (restrictions lifted but revenue still down).
- After new product updates, UI changes, or pricing algorithm adjustments.
- Seasonally—was there an expected high season that underperformed?

**Answer:** Post-pandemic can be one of the reasons

### 4. Where

**Where is the problem most visible?**

- On mobile devices (if mobile drop-off is higher than desktop).
- In high-traffic cities like Manhattan or Brooklyn, with low availability.
- In underperforming neighbourhoods with limited listings but high demand.
- On pages with low conversion rates—search results, booking confirmation, etc.

**Answer:** Across all devices, among all the neighbourhoods (but especially Staten Island)

### 5. Who

**Who is affected?**

- **Guests:** Unable to find desirable properties or confused by the interface.

- **Hosts:** Especially small or new hosts facing low visibility and few bookings.
- **Product teams:** If users are not engaging as expected after the design rollout.
- **Customer support:** If ticket volume for booking/payment issues has risen.

**Answer:** Yes, guests are not able to find desirable properties. Yes, the decline is seen among large hosts who own a large number of listings.

## 6. How

- How can the product team improve the search and booking flow to reduce friction?
- How are bugs and UI issues tracked, prioritized, and resolved across the product lifecycle?
- How often is usability testing conducted to identify pain points from real users?

## Summary:

The decline is coming from all types of users, all types of devices and platforms and all the neighbourhoods (but especially Staten Island and Bronx), maybe because of low availability and increased minimum nights offered by properties due to the post-pandemic.

## High-level strategic importance:

The high-level strategic importance is to **align Airbnb's supply with guest demand**, focusing on improving **availability, guest experience, and pricing** in high-demand areas, while also **leveraging underutilised markets** to drive growth and **maintain competitive advantage** in a recovering travel economy.

## Factors to consider:

### A. System-Related Factors

1. **Technical Glitches or Downtime** – Errors in search, booking, or payment systems may discourage users.
2. **Poor UI/UX Design** – Recent updates may have made the app or website harder to navigate.
3. **Slow Performance on Mobile or Web** – Lag or responsiveness issues can impact user satisfaction.
4. **Inaccurate Search Results** – Search not reflecting guest preferences (e.g., still showing poorly rated or unavailable listings).

Result: Not from above factors

### B. External Factors

1. **Economic Uncertainty** – Inflation, job losses, or reduced discretionary spending can lower travel demand.
2. **Competitor Growth** – More aggressive strategies by rivals like Vrbo, Booking.com, or hotels.
3. **Local Regulations** – Stricter laws on short-term rentals may limit listings or bookings.
4. **Seasonal Trends or Events** – Off-season travel drops or cancellations of large events.

Result: Not from above factors

### C. Internal Factors

1. **Host Performance Decline** – Poor reviews, low engagement, or frequent unavailability.
2. **Mismatch in Supply-Demand** – Lack of desirable listings (mid-priced, short-stay options).
3. **Inadequate Marketing or Targeting** – Not reaching the right customer segments or locations.

4. **Operational Inefficiencies** – Delays in support, onboarding new hosts, or resolving complaints.

**Result:** We will do the funnel analysis

Now we will do the funnel analysis to understand the real root cause of the problem and where it is coming from.

## Funnel Analysis

### **User Funnel Analysis – Airbnb Booking Journey**

#### **1. Platform Entry (Homepage Visit)**

As users enter the Airbnb platform (via web or app), they land on the homepage.

#### **Clarifying Questions & Metrics Reviewed:**

- Did we observe a decline in active users from different traffic sources?
  - **Organic** (direct visits via website/app)
  - **Inorganic** (traffic from social media, influencer marketing, etc.)
  - **Paid** (Google Ads and other paid campaigns)

#### **Answer:**

No, all traffic sources are performing well, and there is no significant drop in active users or engagement at this stage.

## 2. Homepage Engagement

Once on the homepage, users typically scroll to get a sense of the platform and view property suggestions based on location.

### Key Metrics Monitored:

- Click-Through Rate (CTR) on Homepage Tiles
- Impressions on Homepage Listings

### Answer:

No drop observed in either CTR or impressions. Homepage performance remains stable.

## 3. Property Previews (Pre-search)

As users scroll and find something of interest, they click on listings to explore further.

### Observation:

Both CTR and impressions for pre-search listing tiles are consistent and performing well. No drop-offs detected at this stage.

## 4. Search Interaction

Users proceed by clicking the search button to apply filters like location, dates, price, and property type.

### Clarifying Questions:

- Is the search button easily visible and accessible?
- Have there been any recent UI/UX changes affecting search usability?
- Any technical issues with applying filters (e.g., check-in/check-out dates, guest count)?

- Are CTR and impressions for the search action declining?

**Answer:**

There are no visibility, UX, or technical issues. Metrics related to search interaction are performing as expected.

## 5. Search Results View

Filtered search results are displayed.

**Clarifying Questions:**

- Are the results loading correctly and matching applied filters?
- Is there sufficient inventory available based on user preferences?

**Answer:**

While results are loading correctly with no technical issues, users are seeing **limited options** that meet their preferences (e.g., price range, property type, location, review quality).

## 6. Property Exploration Post-Search

Users engage with listings shown in the search results.

**Observation:**

CTR and impressions for individual property views remain consistent. No major drop-off is observed here.

## 7. Booking Readiness Stage

This is the stage where users are ready to reserve a property.



### Issues Identified:

- Many preferred listings are **unavailable** for selected dates (either already booked or not accepting reservations).
- Available listings often have **high minimum night requirements** and **low review ratings**.
- These listings **do not match user preferences**, leading to user dissatisfaction.

### 8. Booking Action (Reserve Button)

Users who proceed to reserve a property are expected to click the “Reserve” button.

### Key Metrics:

- CTR and impressions for the “Reserve” button have **declined significantly**.

### Conclusion:

This is the **critical drop-off point** in the user journey. Although users are reaching the final booking stage, they abandon the process due to poor property availability and misalignment with their preferences.

### Root Causes Identified

1. **High Unavailability** of popular, mid-range properties (due to either full bookings or hosts pausing listings).
2. **High Minimum Night Stays** required for booking, which contradicts user preference for short stays (most bookings are under 7 days).
3. **Low Review Scores** associated with available listings, which undermines trust.
4. **Host Behaviour** – Some hosts may still be cautious post-COVID, avoiding short stays or limiting listing availability.

## What can we do about it?

- **Incentivize hosts** to increase availability, especially for short stays.
- Encourage **review improvements** by offering host coaching or visibility bonuses for better-reviewed listings.
- Prioritize **matching supply to demand** by ensuring more mid-range, short-stay listings in high-demand areas (e.g., Manhattan, Brooklyn).
- **Audit UI/UX** regularly to ensure no hidden usability issues are deterring user actions.