Travel Aggregator Analysis

1. Introduction

Purpose of the Project

The travel industry has evolved significantly with the rise of online booking platforms. However, travelers often struggle with comparing prices across multiple websites to find the best deal. This project aims to analyze booking and session data to understand customer behavior, booking trends, and platform usage.

What is *MyNextBooking*?

MyNextBooking is a new Indian startup that acts as an aggregator for travel booking platforms like Yatra, MakeMyTrip (MMT), and Goibibo. It allows users to compare prices across different services and redirects them to the most suitable platform for booking.

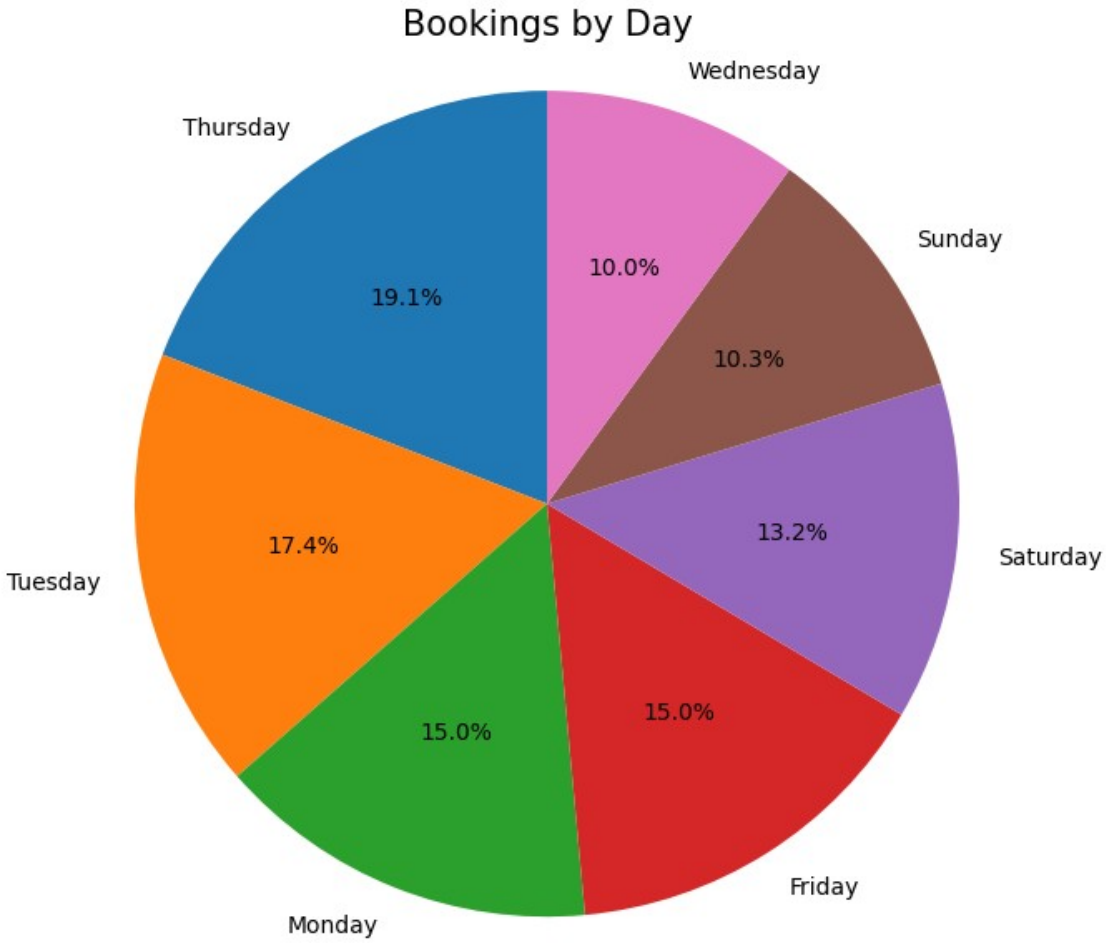
Goal of the Analysis

The objective of this analysis is to uncover patterns in booking behavior, identify the most frequently used travel routes, understand how different devices are used for booking, and evaluate how efficiently users convert searches into actual bookings. These insights will help *MyNextBooking* enhance its platform and improve the user experience.

2. Key Insights & Findings

This section summarizes the most important trends and patterns discovered from the data analysis. The insights below provide a clear understanding of customer behavior, booking preferences, and platform usage.

Booking Trends: Which Days Have the Most Bookings?



The distribution of bookings across the week shows that:

- **Thursday had the highest number of bookings (65),** followed by **Tuesday (59)** and **Monday (51).**
- **Wednesday had the lowest number of bookings (34),** suggesting it is the least preferred day for travel planning.

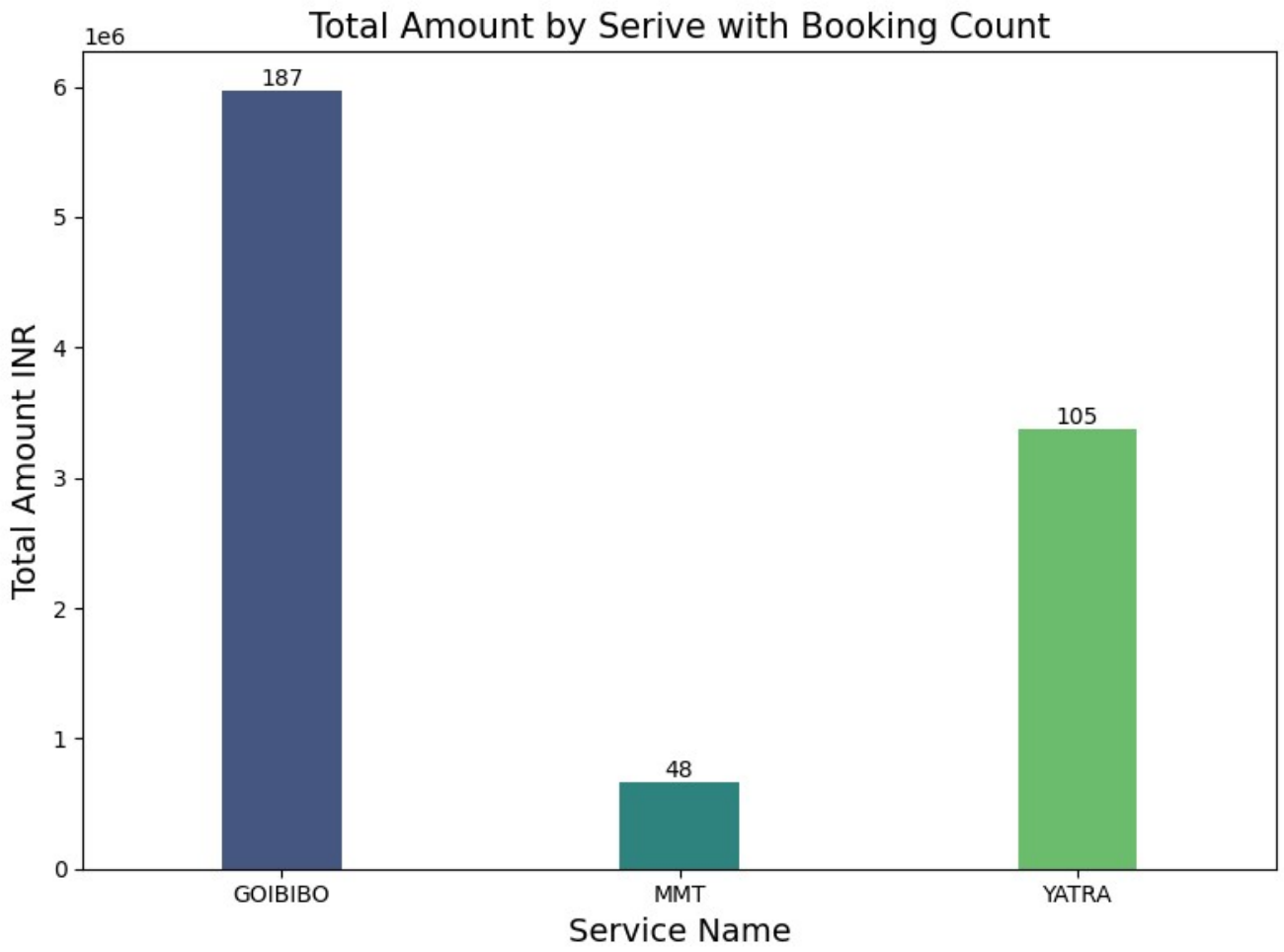
Customer Behavior: How Do Users Interact with the Platform?

- A total of **339 unique bookings** were recorded.
- **331 unique sessions** were created, meaning almost every booking was associated with a session.
- **1360 searches** were performed, highlighting that users often explore multiple options before making a decision.
- **35 sessions had multiple bookings**, meaning some users booked more than one trip within the same session.

These findings indicate that while users explore different options, a significant number of them finalize their bookings in the same session.

Total Bookings & Revenue per Service

The number of bookings and total revenue across different services are as follows:



Service Name	Total Bookings	Total Revenue (INR)
GOIBIBO	187	5,969,072.37
YATRA	105	3,378,702.13
MMT	48	665,669.08

- **GOIBIBO had the highest number of bookings (187) and the highest revenue (~5.97M INR).**
- **YATRA followed with 105 bookings and revenue of ~3.38M INR.**
- **MMT had the least bookings (48) and the lowest total revenue (~665K INR).**

This suggests that GOIBIBO is the most preferred booking service among users.

Popular Routes: Most Frequently Booked Travel Routes

Among customers who booked more than once, the most frequently traveled route was:

- **From:** Gurgaon
- **To:** Roissy-en-France
- **Total Bookings:** 5

Additionally, cities with the most advance bookings (at least 5 departures) were:

1. **Gurgaon (79 bookings)**
2. **Mumbai (17 bookings)**
3. **Delhi (16 bookings)**

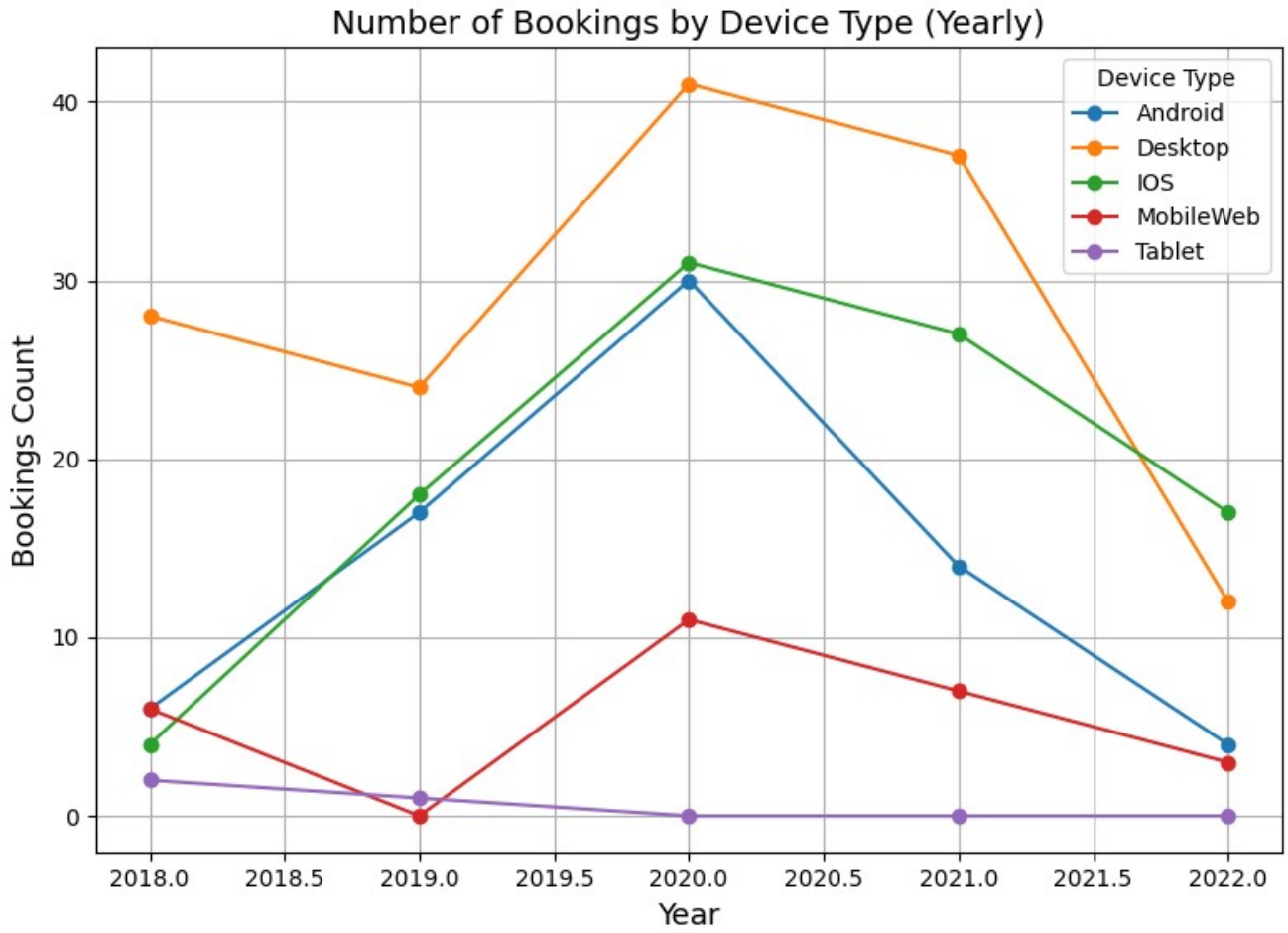
This suggests a strong preference for these travel corridors among frequent travelers.

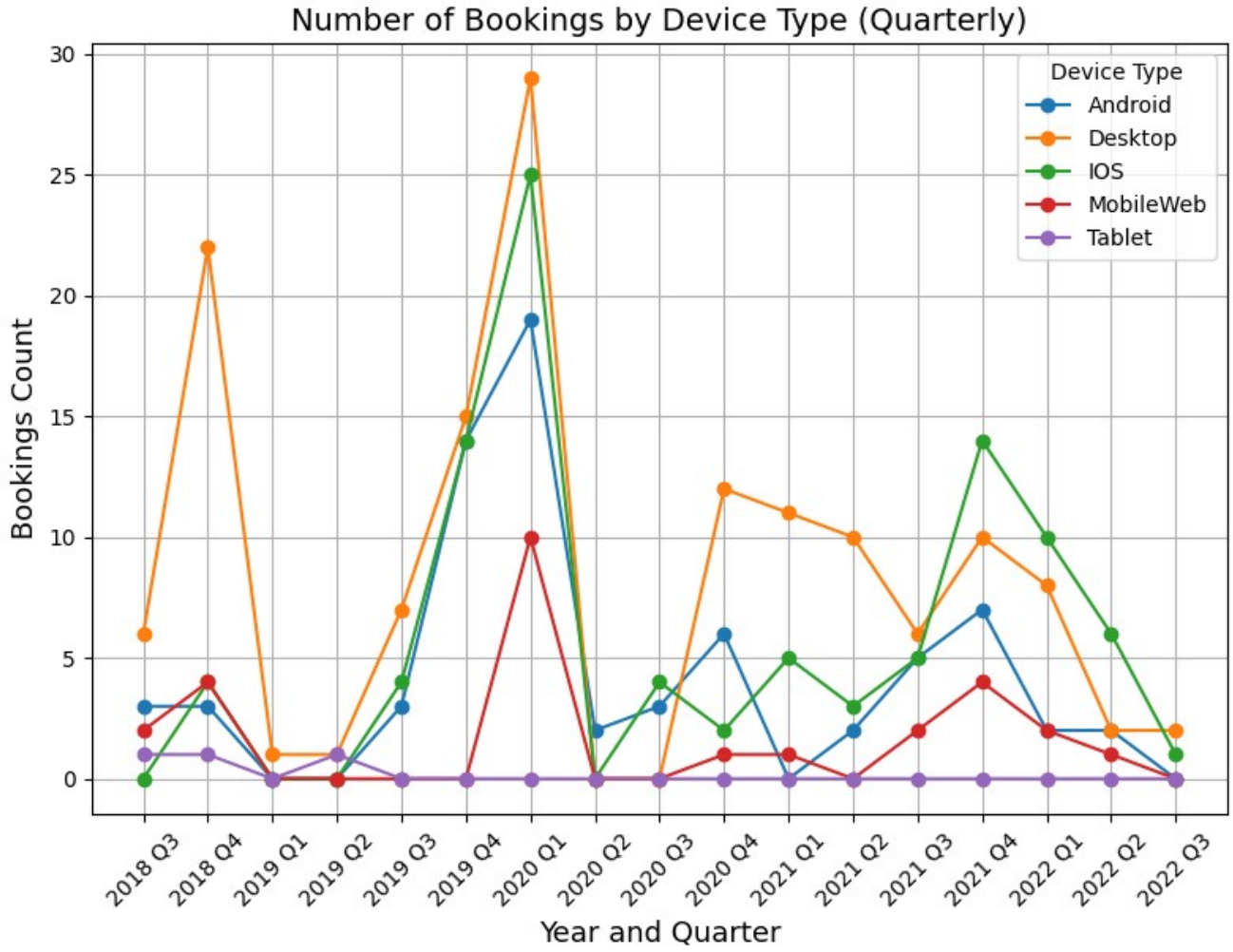
Device Usage: What Devices Are Commonly Used for Booking?

Different travel services show distinct preferences for booking devices:

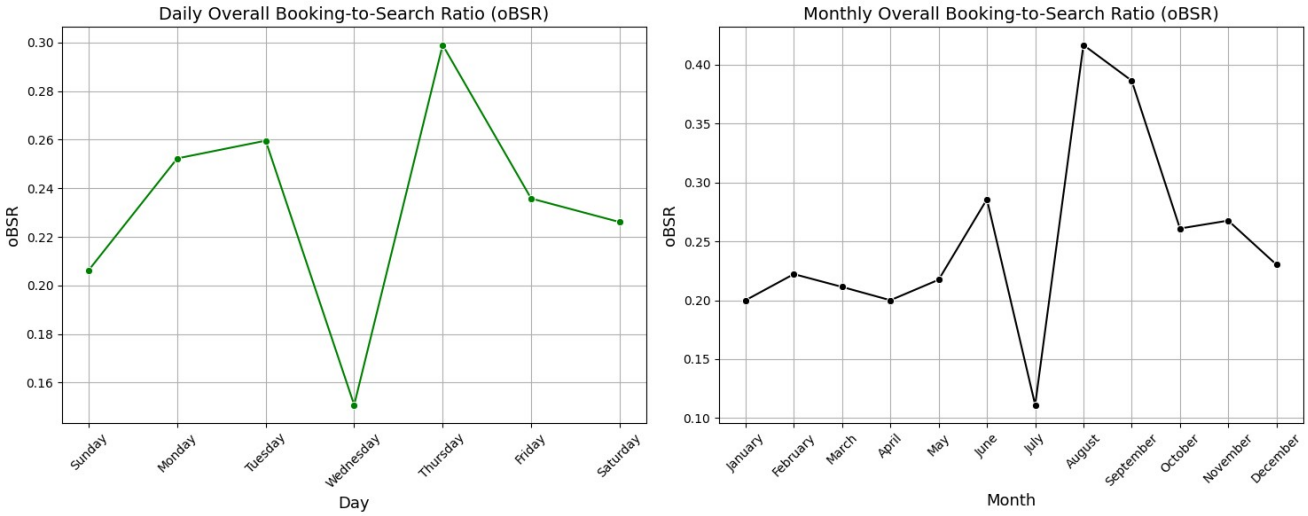
- **GOIBIBO** users mostly book using **iOS devices (70 bookings).**
- **MMT (MakeMyTrip)** users primarily book via **Desktops (30 bookings).**
- **YATRA** users also prefer **Desktops (51 bookings).**

Additionally, trends over time show fluctuations in device usage for bookings.


Number of Bookings by Device Type (Yearly)
Device Type
Android
Desktop
IOS
MobileWeb
Tablet
Bookings Count
0
10
20
30
40
2018.0
2018.5
2019.0
2019.5
2020.0
2020.5
2021.0
2021.5
2022.0
Year


Number of Bookings by Device Type (Quarterly)
Device Type
Android
Desktop
IOS
MobileWeb
Tablet
Bookings Count
0
5
10
15
20
25
30
2018 Q3
2018 Q4
2019 Q1
2019 Q2
2019 Q3
2019 Q4
2020 Q1
2020 Q2
2020 Q3
2020 Q4
2021 Q1
2021 Q2
2021 Q3
2021 Q4
2022 Q1
2022 Q2
2022 Q3
Year and Quarter

Booking Efficiency: How Many Searches Lead to Actual Bookings?



The **overall booking-to-search ratio (oBSR)** measures how many searches result in an actual booking:

- **Thursday had the highest efficiency (29.9%),** meaning nearly **3 out of 10 searches led to a booking.**
- **Tuesday (25.9%) and Monday (25.2%)** also showed strong conversion rates.
- **Wednesday had the lowest efficiency (15.1%)**, indicating that many users searched but did not finalize bookings.

Monthly Trends:

- **August had the highest booking efficiency (41.6%)**, suggesting that users searching in this month had a high intent to book.
- **September (38.6%) and October (26%)** also performed well.
- **July had the lowest efficiency (11.1%)**, meaning users searched more but booked less frequently.

3. Business Recommendations

Booking Trends: Offer Promotions on Less Popular Booking Days

- **Recommendation:** Since **Wednesday** had the lowest booking numbers, MyNextBooking could offer targeted promotions on this day to encourage more bookings. Special deals or discounts could help boost traffic and conversions on this underutilized day.

Customer Behavior: Improve the Search-to-Booking Conversion

- **Recommendation:** The platform could work on enhancing the **search experience** for users, especially on **Wednesday**, where the booking efficiency is the lowest. Introducing features like

personalized recommendations or better search filters might increase the chances that a search will lead to a booking.

Popular Routes: Target Frequent Travelers with Loyalty Programs

- **Recommendation:** For routes with **high repeat bookings**, such as **Gurgaon to Roissy-en-France**, MyNextBooking could introduce **loyalty programs or discounts** to encourage repeat customers. This would help retain travelers who frequently book the same route and incentivize them to use the platform more often.

Device Usage: Optimize the Platform for Mobile and Desktop Devices

- **Recommendation:** Since **GOIBIBO** users prefer iOS, and **MMT** and **YATRA** users prefer desktops, MyNextBooking could optimize its platform for both **mobile and desktop** devices. By improving the mobile experience (especially for iOS users), they can capture more bookings, and by ensuring smooth desktop navigation, they can cater to users who prefer using desktops, especially for more detailed searches.

Booking Efficiency: Reduce Search-to-Booking Gaps

- **Recommendation:** The platform can improve its **booking efficiency** by focusing on the days and months with low conversion rates. For example, during **July**, where the booking efficiency is the lowest, MyNextBooking could introduce **special time-limited offers** or **reminder notifications** to encourage users to complete their booking.

4. Conclusion

The analysis of **MyNextBooking's** platform provides valuable insights into customer behavior, booking preferences, and usage patterns. Here are the main takeaways:

1. **Booking Trends**: Thursday is the most popular day for bookings, while Wednesday sees lower engagement. Offering promotions or discounts on lower-traffic days like Wednesday could help boost bookings.
2. **Customer Behavior**: A significant number of users perform multiple searches but don't always follow through with a booking. Enhancing the search experience, especially on less efficient days, could improve the conversion rate.
3. **Popular Routes**: The most frequently booked routes can be targeted for **loyalty programs** to encourage repeat business and foster customer loyalty.
4. **Device Usage**: Different services show preferences for either mobile (iOS) or desktop. Optimizing the platform for both devices will allow MyNextBooking to reach a broader audience.
5. **Booking Efficiency**: Certain days and months show higher conversion rates. Focusing efforts on improving the booking process during periods of low efficiency can enhance overall conversion rates.