



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

A Study Of Booking Patterns And Customer Preferences In Oyo Hotels

¹ Bangaru Srihari Chandan,

¹ Student,

¹ Business Analytics,

¹ Siva sivani institute of management, Hyderabad, India.

Abstract: OYO Hotels has revolutionized the budget hospitality sector by offering standardized and affordable accommodations across various locations. This study explores booking patterns, customer segmentation, and platform preferences to understand customer behaviour and optimize business strategies. Using secondary data from OYO's internal databases and industry reports, this research analyses seasonal demand, geographical booking trends, and hotel category performance.

The methodology includes data preprocessing, visualization using Power BI, and statistical analysis with Python. Key findings reveal that Maharashtra and Delhi record the highest bookings, while states like Chhattisgarh underperform. Peak booking hours are between 6 PM and 9 PM, with the OYO app emerging as the most preferred booking platform. Customer segmentation highlights four key groups: Top Customers, Loyal Customers, Inactive Customers, and At-Risk Customers, providing actionable insights for personalized marketing strategies.

Results emphasize the importance of seasonal promotions, targeted retention efforts, and regional marketing strategies to enhance customer engagement. By leveraging data-driven insights, OYO can refine its service offerings, improve user experience, and drive sustained growth in the competitive budget hotel industry.

I. INTRODUCTION

OYO Rooms, commonly known as OYO, is a global hospitality chain that provides budget-friendly, standardized accommodations. Founded in 2013 by Ritesh Agarwal, OYO started as a platform to aggregate budget hotels and offer a consistent stay experience. It has since expanded to multiple countries, revolutionizing the hotel booking industry with its technology-driven approach, easy booking options, and affordable pricing.

OYO Rooms, officially known as OYO Hotels & Homes, is a technology-driven hospitality chain founded in 2013 by Ritesh Agarwal. The company started as Oravel Stays, an Airbnb-like platform, but quickly evolved into OYO, focusing on budget accommodations with standardized quality and services.

OYO partners with small and medium-sized hotels, transforming them into branded properties with uniform amenities, customer support, and technology integration. It uses artificial intelligence, data analytics, and dynamic pricing models to optimize hotel occupancy and enhance customer experience.

Over the years, OYO has expanded globally, operating in countries like India, China, the U.S., the U.K., Indonesia, and more. The company's growth strategy includes aggressive expansion, strategic acquisitions, and a focus on digital transformation.

Despite facing challenges such as regulatory hurdles and market fluctuations, OYO continues to be a key player in the hospitality sector. It leverages customer insights, loyalty programs, and partnerships to maintain its competitive edge.

OYO's impact on the hospitality industry is significant, making affordable stays accessible while enabling small hotel owners to scale their businesses. The brand's commitment to innovation, affordability, and customer satisfaction keeps it at the forefront of the budget hotel segment.

Origins and Business Model

OYO Rooms, officially known as OYO Hotels & Homes, was founded in 2013 by Ritesh Agarwal with a vision to provide affordable, technology-driven, and standardized accommodations to travellers. The company began as an aggregator of budget hotels, ensuring a consistent experience for customers while helping small and independent hotel owners optimize occupancy and revenue.

OYO's business model revolves around:

- **Franchising and Leasing:** OYO partners with hotel owners, rebranding and upgrading their properties under the OYO umbrella.
- **Technology-Driven Bookings:** OYO's proprietary technology, including dynamic pricing algorithms and AI-powered customer insights, enhances operational efficiency.
- **Standardized Hospitality:** Every OYO hotel offers uniform amenities such as Wi-Fi, air conditioning, and clean rooms, ensuring reliability for guests.

Market Position and Expansion

OYO has rapidly expanded, operating in over 80 countries, including India, China, the U.S., the U.K., and Indonesia. Its presence in the Indian hospitality market is particularly strong, with Maharashtra, Delhi, and Karnataka leading in bookings, as per your report.

Customer Booking Patterns and Preferences

Your report highlights key customer behaviour insights that drive OYO's growth:

- **Seasonal Trends:** Peak booking months are December to February due to holidays and festivals, while discounts are highest in July to boost occupancy in off-peak months.
- **Preferred Booking Time:** Most reservations occur between **6 PM and 9 PM**, suggesting a tendency for last-minute or after-work bookings.
- **Platform Dominance:** The OYO mobile app is the preferred booking platform, used by **50.74%** of customers.
- **Hotel Type Preferences:**
 - **Most Booked Category:** "Rooms" hotels with affordable pricing attract the highest number of customers.
 - **Highest-Priced Category:** "Study Stay" hotels, priced at **₹7,999** per booking, cater to long-term business or study travellers.
 - **Best-Rated Category:** "Capital O" hotels have the highest average rating (3.43 stars), reflecting superior customer satisfaction.
- **Customer Segmentation:** OYO's customer base includes "Top Customers" (loyal and frequent bookers), "Loyal Customers," "Inactive Customers," and "At-Risk Customers." Maharashtra, Delhi, and Gujarat show high loyalty, while regions like Goa and Chhattisgarh struggle with customer retention.

Challenges and Competitive Landscape

Despite its rapid growth, OYO faces several challenges:

- **Market Competition:** Competing with other budget hotel chains and online travel agencies.
- **Data Quality Issues:** Inconsistent data can affect customer segmentation and predictive analytics.
- **Economic Factors:** Travel budgets fluctuate due to economic conditions, impacting booking behavior.
- **Regulatory Hurdles:** Legal and compliance challenges in different regions can slow down expansion.

Strategic Recommendations (Based on Your Report's Findings)

1. **Enhancing Customer Engagement** – Improve loyalty programs and personalized offers for "Loyal" and "At-Risk" customers to increase retention.
2. **Strengthening Digital Presence** – Invest in AI-driven personalization on the OYO app, as it is the most used platform for bookings.
3. **Targeting High-Demand Regions** – Focus on Maharashtra and Delhi, the top-performing regions, with exclusive promotions.
4. **Addressing Low-Performance Areas** – increased awareness and marketing in underperforming regions like Chhattisgarh to improve customer acquisition.
5. **Optimizing Seasonal Pricing** – Leverage data analytics to fine-tune pricing strategies based on peak and off-peak seasons.

1.1 The Need for the Study

The hospitality industry is very instrumental in supporting economic growth. More so, in countries such as India, with domestic and international tourism markets which are thriving. Budget hotels like those of OYO have made traveling accessible to a greater population. Knowledge of booking patterns and customer preference is essential to sustaining a competitive advantage and ensuring long-term growth. This research offers insights that not only improve the operations of OYO but also contribute to the wider knowledge base in the hospitality industry, to the benefit of policymakers, competitors, and researchers.

1.2 Objectives of the Study

The primary objective of this project is to analyse booking patterns and customer preferences at OYO hotels to derive actionable insights for enhancing customer engagement and optimizing business strategies. Specific objectives include:

1. **Understanding Seasonal and Time-Based Trends:** Identify peak booking periods and customer preferences during specific times of the year and day. This helps optimize inventory and pricing strategies, ensuring alignment with demand cycles.
2. **Evaluating Customer Segmentation:** Examine various segments of customers, like "Top," "Loyal," "Inactive," and "At-Risk," to devise strategies for retention, loyalty building, re-engagement, and win-back campaigns.
3. **Analysis of Hotel Types and Preferences:** Review the performance of different hotel types based on booking volume, average pricing, and customer ratings. This can be used to customize the product according to the preferences and needs of customers.
4. **Platform Usage Analysis:** Study consumer choices for different booking platforms, particularly the OYO app, to increase user-friendliness and consumer satisfaction.
5. **Geographical Analysis:** Conduct an analysis of states and cities to understand booking trends at particular levels. For example, while Maharashtra and Delhi could be performing well, places such as Chhattisgarh are underperforming. This would ensure appropriate marketing and operational adjustments are undertaken.
6. **Engaging with Customers:** Use customer segmentation insight to create targeted campaigns that improve the engagement and ultimately generate greater revenue.

1.2 Study Scope

This study considers various dimensions of customer behavior and operational performance in OYO. The analysis spans geographic regions, customer demographics, and categories of hotels to gain an all-rounded view of factors behind booking trends. Further, the study assesses how external factors such as seasonality of demand and usage of platforms interact with internal metrics such as hotel ratings and average price. The results are likely to inform strategic decisions at OYO and act as a benchmark for other studies in the hospitality industry.

1.4 Methodology Overview

- **Data Collection:**
Secondary Data: Collected from OYO's internal databases, industry reports, and scholarly articles.
- **Tools and Techniques:**
Power BI for data visualization.
Python for statistical analysis and predictive modelling.
- **Analysis Focus:**
Seasonal trends.
Geographical distribution.
Customer segmentation using RFM analysis

1.5 Significance of the Study

The findings of this study are highly relevant to the strategic planning of OYO. The company can upgrade its service offerings and marketing strategies with the help of this research, which is focused on customer preferences and booking behavior. In addition, geographical and seasonal trends from the study can be used for targeted campaigns. In a broader context, this research emphasizes the use of data-driven decision-making in the hospitality industry.

Internal Factors of the Dataset:

1. Customer demographics, including age, location, and booking frequency.
2. Hotel characteristics (category, reviews, price).
3. Booking patterns (hour, day of the week, month).
4. Data on platform usage (mobile app vs. website).

Exogenous Factors Affecting the Data Set

1. Seasonal variability in demand.
2. Economic factors affecting travel budgets.
3. Advancements in booking platforms technology.
4. Competitive pressure from other budget hotel groups.
5. Travel restrictions caused by exogenous crises (pandemics).

Research Methodology:

A well-structured research methodology forms the backbone of this study, ensuring that the analysis is both comprehensive and reliable. Only secondary data is used; advanced analytical tools are made use of to ensure appropriate insights.

1. Research Design:

The study follows a descriptive research design aimed at exploring and analyzing customer booking behaviors and preferences in a systematic manner. This design helps in identifying patterns, correlations, and actionable insights that align with the objectives of the study.

2.Data Collection Methodology:

Secondary Data: The research is based solely on secondary data obtained from OYO's internal databases, industry reports, scholarly articles, and publicly accessible resources. This includes historical booking data, customer feedback, platform usage statistics, and performance metrics of various hotel categories. These data points will give a comprehensive view of customer behavior and operational efficiency.

3.Data Processing:

Data Cleaning and Preprocessing: Raw data collected from different sources is cleaned to be made consistent and accurate. Duplicate entries, missing values, and anomalies are handled using Python with data preprocessing techniques.

Data Integration: The cleaned data is integrated to form one common dataset, which facilitates deep analysis across various variables, such as geographic location, booking frequency, and customer segmentation.

4. Analytical Tools and Techniques:

Power BI: Utilized to build interactive dashboards and visualizations that represent trends, patterns, and insights well. Power BI makes it easy to represent complex data in a simple and intuitive way.

5. Critical Analytical Focus Areas:

- **Seasonal and Time-Based Trends:** Analysis of booking data across different seasons and times of day to identify peak demand periods.
- **Geographical Analysis:** Examination of state- and city-level data to determine high-performing and underperforming regions.
- **Platform Preferences:** Insights into the dominance of the OYO app versus other platforms.
- **Hotel Type Performance:** Comparative analysis of different hotel categories based on bookings, ratings, and revenue generation.

6.Validation and Quality Assurance:

Data validation techniques are used to ensure that the information obtained is reliable and accurate. Cross-referencing of the insights with industry benchmarks lends further credibility.

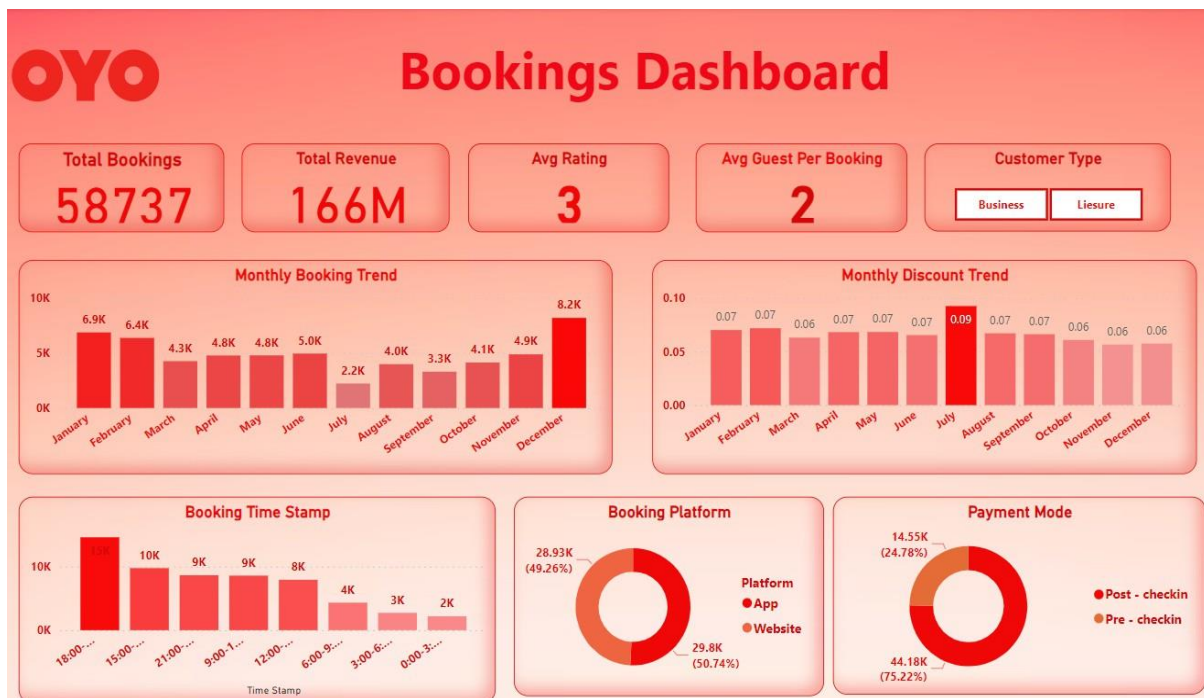
7.Ethical Considerations:

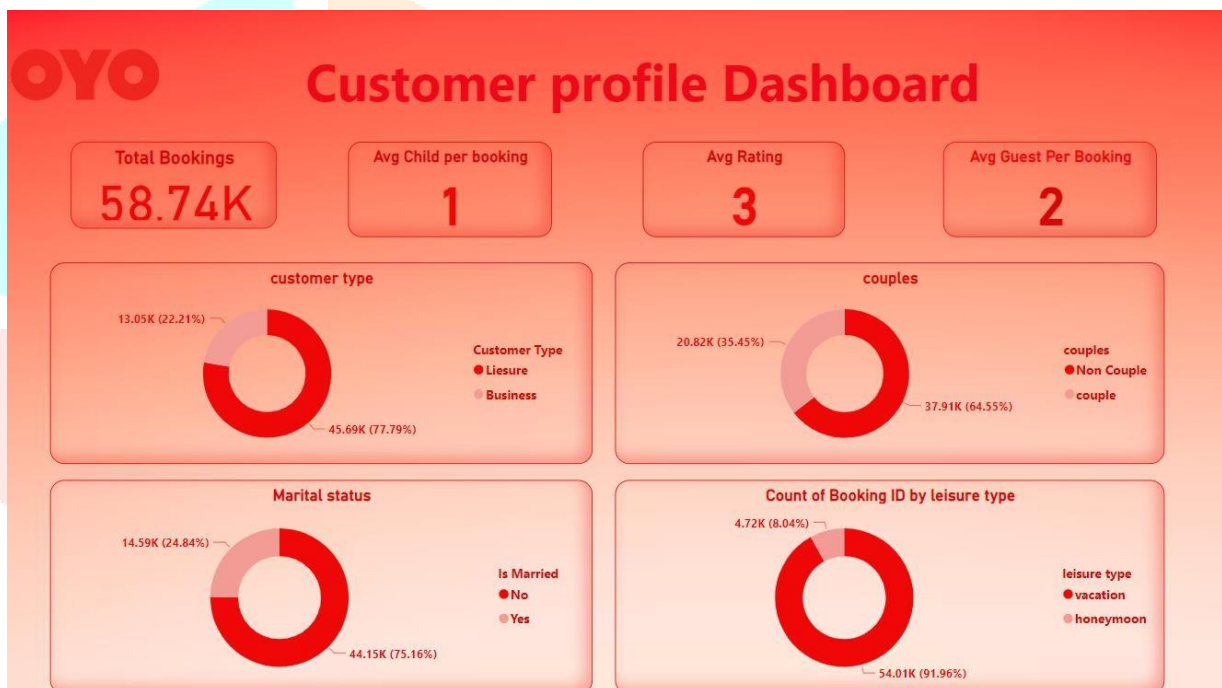
Data privacy and confidentiality are maintained at all times. Only anonymized data is used, and all analysis is done according to ethical research practices and guidelines.

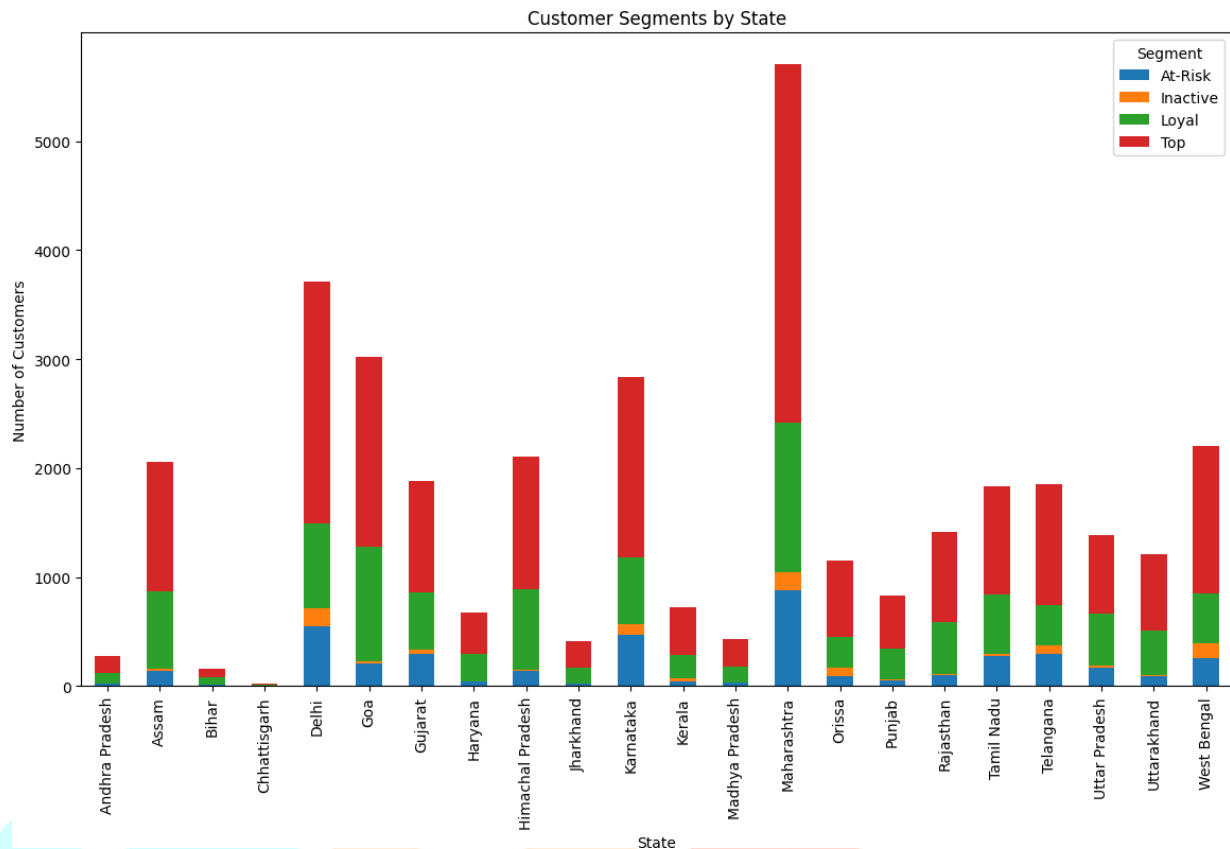
8.Presentation of Findings:

Results are presented in the forms of visually rich and detailed reports. Chartist, graphs, and infographic usage ensures that stakeholders make easy and clear interpretations.

Data Analysis







Customer Segmentation Analysis:

Regional Insights Segmentation of the customers into distinct categories based on their behavior-the Top Customers, Loyal Customers, Inactive Customers, and At-Risk Customers-would be important for the opportunity to grow and retention strategy. Analyzing the spread of these customer segments in different states helps businesses understand how to design marketing programs to improve engagement and retention. Below is an extended view of each segment with the regional insight:

1. Major Customers (Red)

Major Customers refer to the most valuable section, which signifies high values of Recency, Frequency, and Monetary (RFM) score. They stick to the brands and go on to continuously make several purchases and end up making a lot in terms of spending. So, in this regard, these customers happen to be among the prominent revenue-generating customers that are essential in the successful running of businesses over extended periods. Insights across Regions:

States like Delhi, Maharashtra, Karnataka, and West Bengal have the maximum concentration of Top Customers. These states reflect good engagement with the customers who shop frequently as well as higher average spending.

Strategic Recommendations

- Retention Efforts: Maintain the relationships with such customer by providing loyalty rewards or exclusive benefits to them to be one of the first customers for the new product launches or tailor-made experience.
- Customer Support: Treat these customers with premium customer service so that they feel satisfied and are committed to the brand in the long term.
- Region-Specific Campaigns: Regional-specific campaigns or events targeting these states could help in cementing brand loyalty further.

2. Loyal Customers (Green)

Loyal Customers continuously interact with the brand by making purchases and interacting with marketing efforts. As such, they may not necessarily add as much revenue to the company as Top Customers; however, their steady stream of engagement is a sure bet for future sales. They like what the brand has to offer and commit to it over time.

Regional Insights:

Mainly the states of Maharashtra, Gujarat, Delhi, and West Bengal are the locations that have a large share of Loyal Customers. The results of these states depict the fact that customers are not necessary high spenders but interaction with the brand has shown to be consistent. Recommendations for Strategy:

- Targeted Offers: Leverage loyalty programs, offers, or personalized emails further engage these customers and induce spending on higher amounts.
- Exclusive Content/Events: Exclusive content or events may help them connect better with the brand.
- Cross-Selling Opportunities: Introduce products or services that are relevant to their purchase behavior, encouraging them to spend more.

3. Inactive Customers (Orange)

Inactive customers were once active but seem to have declined in recent days. They may have a history of frequent purchases with the company but have turned out to be less active over time, possibly resulting from factors such as shifting preferences, competition, and loss of interest in a brand.

Regional Insights

The states of Delhi, Goa, and Maharashtra have the highest number of inactive customers. Although this segment is small compared to the other segments, it is still the customers who have a potential for re-engagement.

Strategic Recommendations:

- Re-Engagement Campaigns: Revive this segment through targeted re-engagement campaigns like email marketing, personalized offers, or discounts that reignite their interest in the brand.
- Feedback Surveys: Customer surveys and feedback forms might help understand how they stopped using the services or products, and reasons for improvement in them so that these can be reused.
- Offer Incentives: Creating attractive promotions like limited offers or a new product offer can tempt inactive customers into coming back.

4. At-Risk Customers (Blue)

At-Risk Customers are at the point of going inactive. These customers have indicated signs of disengagement, such as lower purchase frequency or abandonment of their normal shopping behavior. It is critical to recognize and respond to the needs of these customers before they become fully inactive in order to minimize churn.

Regional Insights:

States like Goa, Maharashtra, and Karnataka have a high percentage of At-Risk Customers, which means that some retention strategies need to be implemented in these regions as well.

Strategic Suggestions

Win-Back Programs: Develop win-back campaigns tailored to this segment; it could be in the form of discount offers, exclusive deals, or personalized messages highlighting their importance to the brand.

- Proactive Communication: Address these customers through various communication avenues such as email, SMS, or even phone calls to understand their issues and provide customized solutions.
- Higher Engagement: Engage more frequently with loyalty programs or by providing sneak previews of new products to keep this customer engaged.

Regional Insights Overview:

From the data, it would be very clear that Maharashtra is a market that has much more concentration of customers within all the four categories, which makes it look a very potential market to focus on in terms of customer growth and retention. While the state has many Top Customers and Loyal Customers, there are also many At-Risk and Inactive Customers present. This makes it an area that needs targeted retention strategies to ensure that the brand maintains its strong position, thereby reducing the chances of churn.

In other regions such as Goa and Karnataka, the distribution of customers in the At-Risk and Inactive segments shows that there is a greater need for focused attention. By using region-specific campaigns and retention tactics, businesses can improve customer engagement and convert these customers into Loyal or Top Customers over time.

FINDINGS:

Findings and conclusions drawn from such analytical considerations of customer bookings and segregation data would be of the utmost importance in understanding buyer behavior, regional performance as well as trends within booking ecosystems. This chapter has summarized key patterns identified through such considerations and has derived actionable recommendations for businesses through which they can enhance strategy and optimize customer engagement.

Seasonal Trends:

The peak demand months are December, January, and February. It means that this season is the peak time in terms of hotel bookings by customers. This is perhaps because of the holiday seasons, New Year vacations, and other festive seasons. Such seasons have always had more travel activity.

•Recommendation:

Business must take advantage of this period by providing promotions, early-bird discounts, and special packages to attract more customers during the peak months. Preparing for an increase in demand by keeping adequate inventory and staffing also helps improve customer experience at the busiest times.

Discount Trends:

An analysis of discount trends reveals that July records the highest discounts offered. This is probably because of mid-year promotional campaigns or seasonal sales, which businesses use to attract customers during a period of generally lower bookings.

•Recommendation:

To keep the customers interested in the off-season, business houses could repeat such discounts or provide value-added services during low-demand months. The discount can be well publicized in marketing and can boost bookings and interest in the customer.

Booking Timeframe:

The highest volume of hotel bookings falls in between 6 PM and 9 PM, which are peak hours for booking. The above pattern shows that more customers tend to make reservations during the evening when people might have ample time off work or free to decide on travel plans and fix up the booking accordingly.

•Recommendation:

To maximize marketing and sales efforts, businesses should schedule promotions or targeted campaigns around this peak booking window. It could also be useful to make sure that customer service and support are available during those hours to help with last-minute booking decisions.

Booking Platform:

The OYO app has emerged as the most popular platform for hotel bookings, where 50.74% of the customers preferred to book from this app. Its dominance in the booking process would be due to the simplicity of the app, its ease of use, and convenience along with brand recognition.

•Recommendation:

To further capitalize on this trend, businesses should consider improving the app experience with features such as personalized recommendations, exclusive app-only discounts, and simplified booking processes. Focusing on app-based marketing could drive even more traffic and bookings through this popular channel.

Popular Hotel Type:

The Rooms hotel type is the most often booked category, at a total of 7,162 bookings. It, therefore, indicates that the standard room options are highly preferred, as they could be the cheapest and thus accommodate more clients.

Businesses should focus on making the Rooms category competitive by giving attractive pricing, upgrading features of the rooms, or special packages to increase the value for customers. In addition, promotions for these room types could increase bookings even more.

High-Priced Hotel Type:

The Study Stay hotel category commands the highest average price per booking at ₹7,999. This indicates that customers seeking specialized stays, such as long-term accommodations for study or work purposes, are willing to pay a premium for quality or convenience.

•Recommendation:

High-priced hotel types would require businesses to market these as exclusive benefits and value accommodations. These include discounts for longer stays, premium amenities, and tailored services. This can appeal to targeted marketing, which would go well with customers looking for higher-end, specialized options.

Best-Rated Hotel Type:

Capital O hotels are rated as the best hotel category, with an average of 3.43 stars. This means that the customers who stay in these hotels have a generally positive experience, probably because of good service, amenities, and overall guest satisfaction.

•Recommendation:

High-end discerning customers will come more likely attracted by quality and trusted capital O brands. Ensuring quality in the hotels offered while timely attending to the views of their clients keeps such a positive reputation on which this depends.

Guest Average:

The average number of guests per booking is two persons, which suggests most customers travel with a companion be it for business or for leisure purposes. Therefore, it means that this call for providing accommodations meant to accommodate couples or small groups of people.

•Recommendation:

Hotels should offer room configurations or packages to accommodate this trend, like double occupancy discounts or special offers for two-person bookings. Tailored promotions for couples or small groups would help attract this segment.

State with Most Bookings:

Maharashtra tops the chart by garnering the maximum bookings, with 8,613 reservations. This again would be the best state-wise performance, both in terms of market size and strong customer base in this region.

•Recommendation:

Given the strength of Maharashtra, businesses should concentrate on further strengthening their presence in this state by offering region-specific promotions or opening new locations in high-demand cities like Mumbai and Pune. Furthermore, partnerships with local businesses could boost customer acquisition and retention.

State with Fewest Bookings:

On the other hand, Chhattisgarh has the least bookings at 26. This is an indication that the region has the lowest engagement with the brand, either because of lesser demand or low market penetration.

•Recommendation:

Targeted marketing and localized campaigns may help increase awareness and bookings in this region. Exploring partnerships with local influencers, offering introductory promotions, or establishing new marketing channels could be helpful in generating more interest in Chhattisgarh.

Top City:

Delhi is the best performing city and has the highest number of reservations, at 3.7k reservations. That means Delhi is a hot spot for hotel reservations because of business as well as leisure travel.

•Recommendation:

Businesses should consider expanding their presence in Delhi with more hotel options, targeted city-wide promotions, and exclusive deals for local residents or regular visitors. Enhancing customer experiences and loyalty programs specific to Delhi could also drive further growth in this city.

Customer Segments Insights:

Delhi is the best performing city and has the highest number of reservations, at 3.7k reservations. That means Delhi is a hot spot for hotel reservations because of business as well as leisure travel.

•Recommendation:

More hotel options, city-wide promotions, and deals for local residents or regular visitors could be considered to expand the business presence in Delhi. It could also be driven through enhancing customer experiences and loyalty programs specific to Delhi.

Loyal Customers (Green):

Loyal Customers demonstrate consistent transactions but are not necessarily higher spenders as Top Customers. They are mainly distributed in Maharashtra, Gujarat, Delhi, and West Bengal. These customers are great prospects for loyalty programs that can encourage repeat bookings.

•Recommendation:

By improving loyalty programs, a business can encourage repeat bookings from this segment. Personalized offers, seasonal discounts, and exclusive services could enhance their engagement.

At-Risk Customers (Blue):

At-Risk Customers are nearing inactivity and need special care. They are mainly in Goa, Maharashtra, and Karnataka. Retention efforts like win-back campaigns are of critical importance to prevent churn.

•Recommendation:

Businesses should deploy focused retention strategies, including personalized offers and special incentives, to reduce churn in these regions and encourage these customers to re-engage.

Conclusion:

The findings of the report expose key seasonal trends, prevalent booking platforms, and customers' choices that businesses can harness to achieve optimal marketing and retention measures. By focusing on high performers like **Maharashtra and Delhi**, introducing season-specific promotions tailored to those seasons, and targeted retention campaigns for customers at-risk and inactive ones, it will help a business strengthen its overall performance and gain sustainable growth.

References:

- <https://www.sciencedirect.com/journal/international-journal-of-hospitality-management/vol/101>
- <https://journals.sagepub.com/doi/abs/10.1177/1096348020944676>
- <https://www.sciencedirect.com/journal/journal-of-business-research/vol/101>
- <https://www.penguinrandomhouse.com/books/644638/the-oyo-story-by-ritesh-agarwal/>
- <https://www.hvs.com/article/8164-india-hospitality-industry-report-2022>
- <https://www.euromonitor.com/budget-hotels-in-india-a-market-analysis/report>
- https://www.researchgate.net/publication/340532649_OYO_Rooms_A_Disruptive_Innovation_in_the_Hospitality_Industry

