

## **1 INTRODUCTION**

### **1.1 Overview**

A brief description about your project

### **1.2 Purpose**

The use of this project. What can be achieved using this.

## **2 Problem Definition & Design Thinking**

### **2.1 Empathy Map**

Paste the empathy map screenshot

### **2.2 Ideation & Brainstorming Map**

Paste the Ideation & brainstorming map screenshot

## **3 RESULT**

Final findings (Output) of the project along with screenshots.

## **4 ADVANTAGES & DISADVANTAGES**

List of advantages and disadvantages of the proposed solution

## **5 APPLICATIONS**

The areas where this solution can be applied

## **6 CONCLUSION**

Conclusion summarizing the entire work and findings.

## **7 FUTURE SCOPE**

Enhancements that can be made in the future.

## **8 APPENDIX**

### **A. Source Code**

Attach the code for the solution built.

# **Analyzing The Performance & Efficiency of The Radisson Hotels Using Data Visualization Techniques**

## **1 INTRODUCTION**

### **1.1 Overview**

#### **Project Description:**

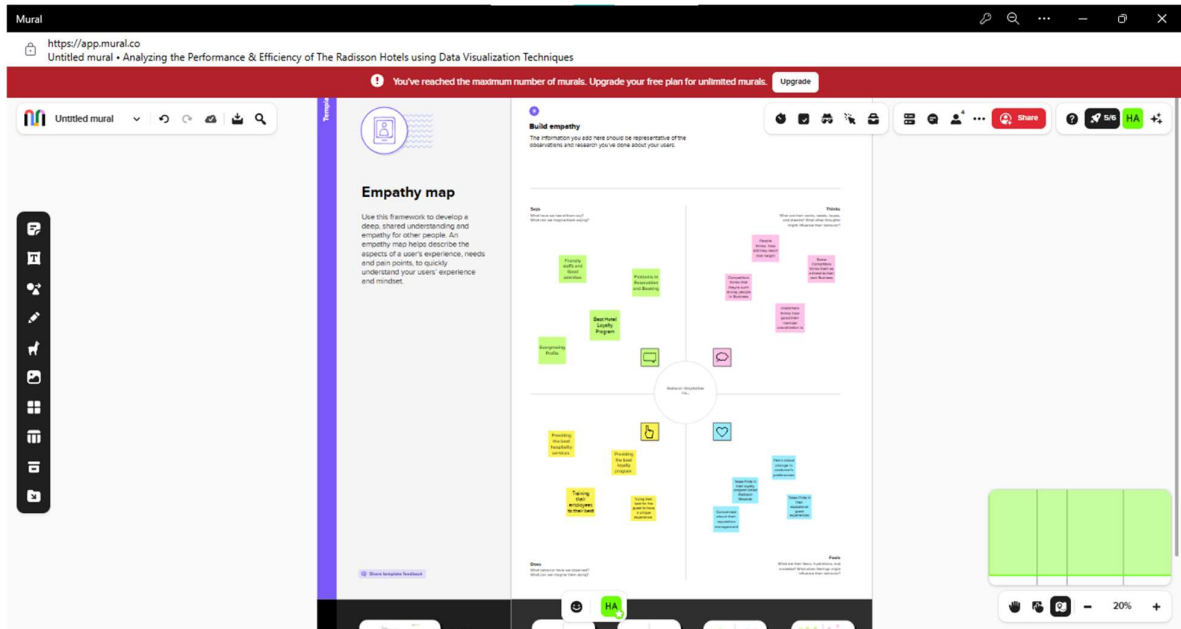
The hotel industry is a wide range of companies that provide accommodation services to travelers and tourists. This includes facilities ranging from luxury resorts to budget motels, extended stay hotels and boutique hotels. Hotels can be found in nearly every region of the world and are often an important part of a particular region's tourism and travel industry. Radisson owns several five-star hotels across India. 100 years in the hospitality industry. Strategic moves and ineffective management decisions by other competitors are causing Radisson to lose market share and revenue in the luxury/business hotel category. In a strategic move, Radisson's CEO wanted to integrate business and data intelligence to regain market share and revenue. Our job is to create analytical dashboards and stories to provide insights for making better business decisions.

### **1.2 Purpose**

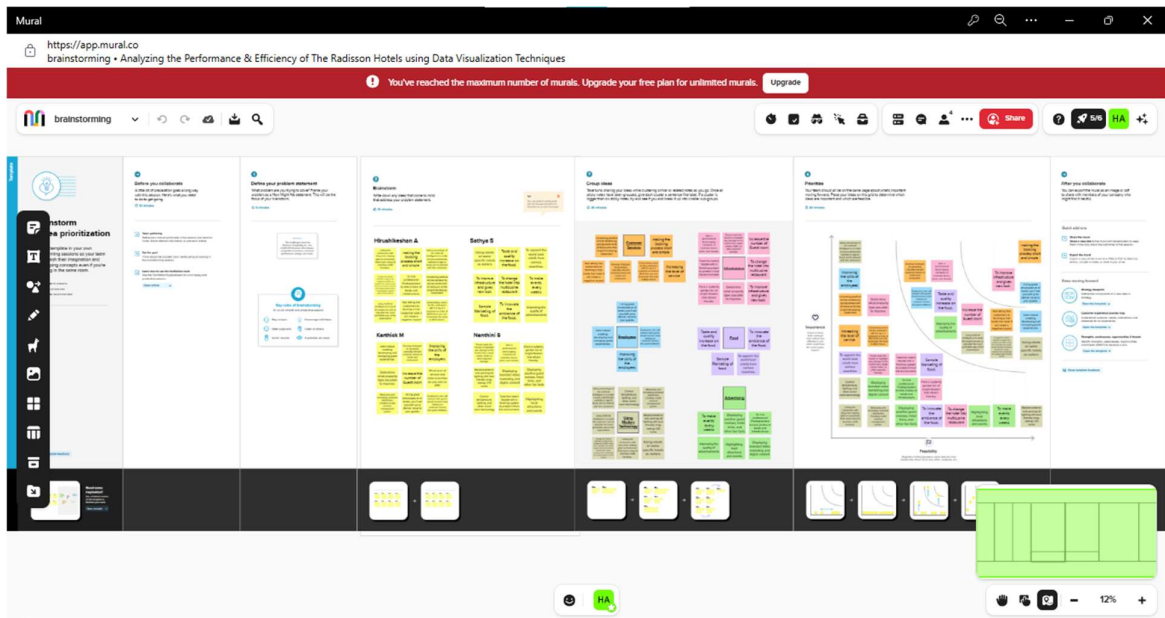
Performance data is critical in the hospitality industry to evaluate and improve hotel operations. This data can be used to demonstrate the hotel's value to stakeholders such as investors and destination marketing organizations. Hotel performance data reports typically include metrics such as average daily room rate, revenue per available room, and market analysis. Factors such as sales performance, innovation and service excellence should be considered when evaluating a hotel's performance. In addition, there are key metrics such as average revenue per available room, which vary by market, segment and time of year. By analyzing performance data, hotels can identify areas for improvement and make data-driven decisions to improve operations.

## 2 Problem Definition & Design Thinking

### 2.1 Empathy Map



### 2.2 Ideation & Brainstorming Map

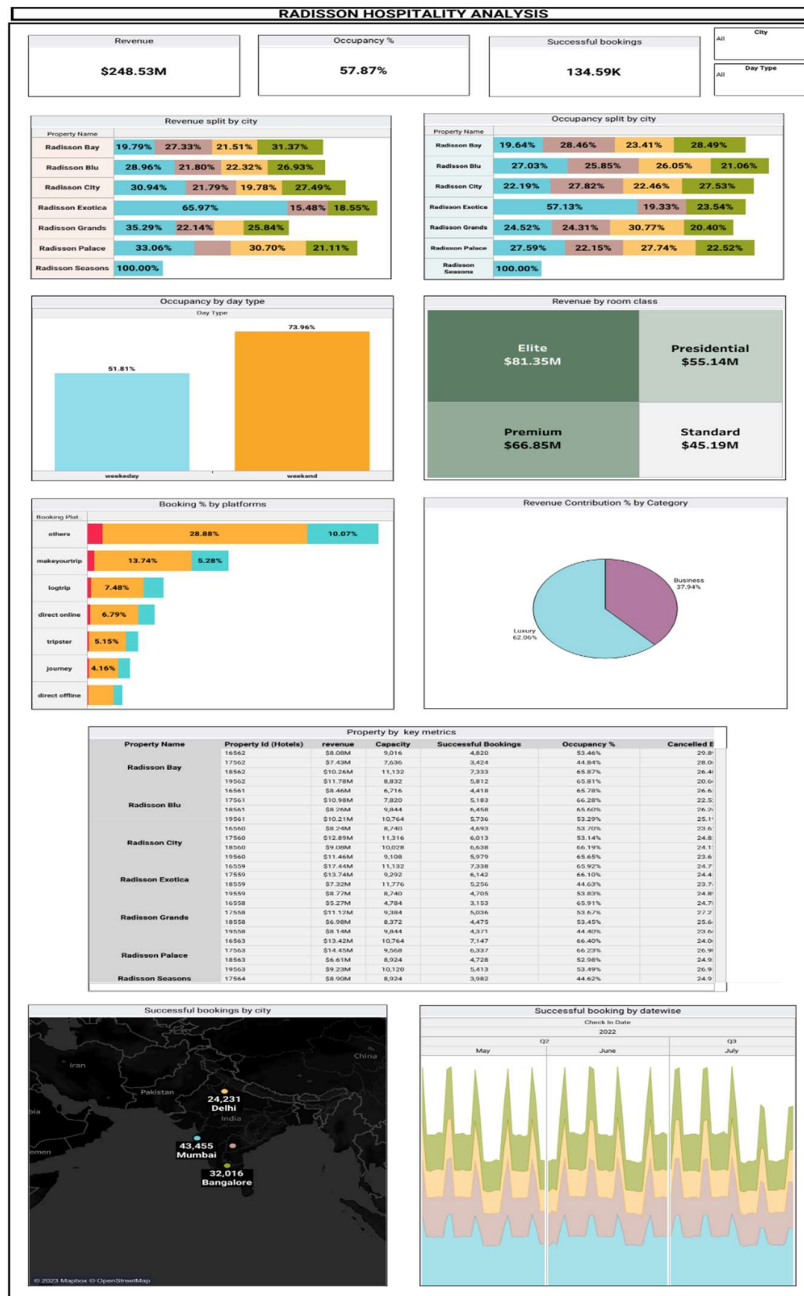


## 3 RESULT

# Project Report

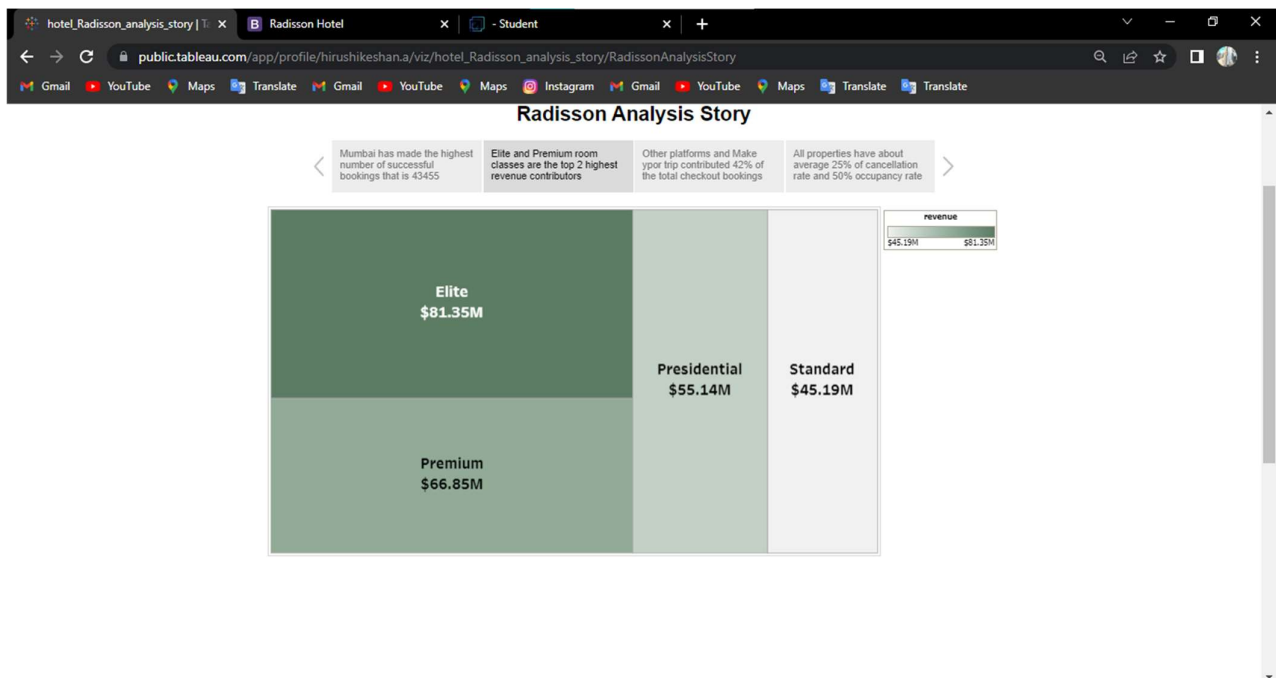
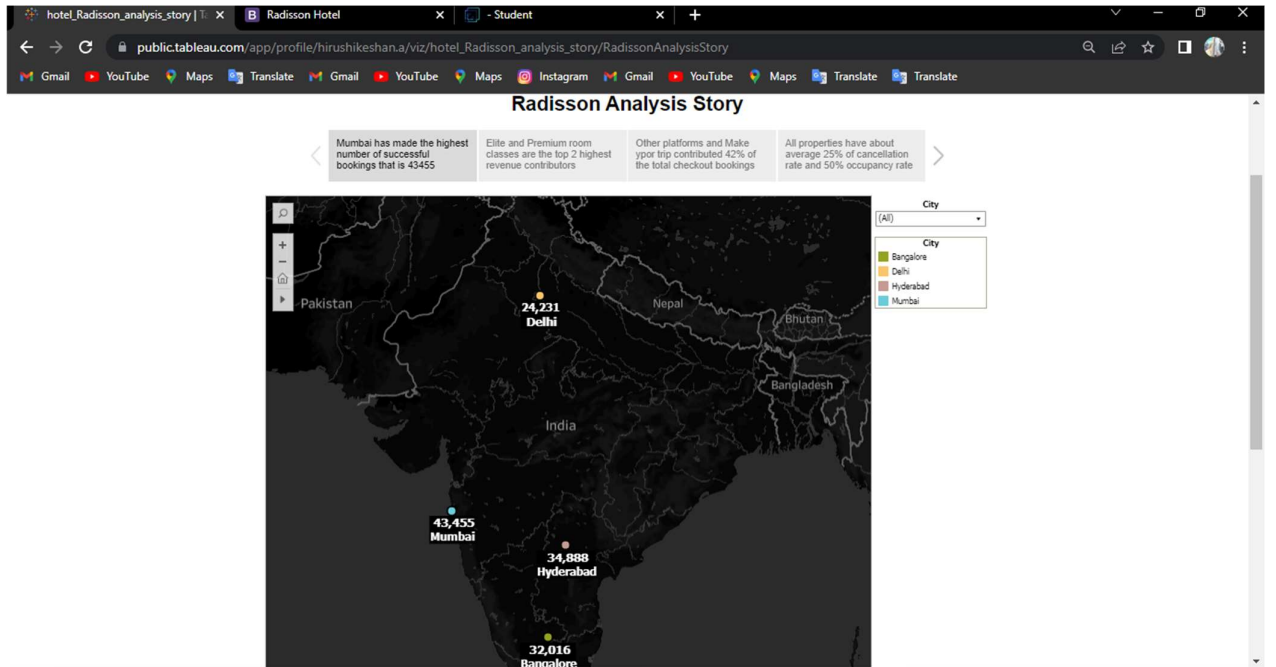
Worksheets are created with a given dataset in Tableau, dashboards and stories are created with worksheets. I published the dashboard and story files in Tableau. Published dashboards and stories are

## Dashboard:

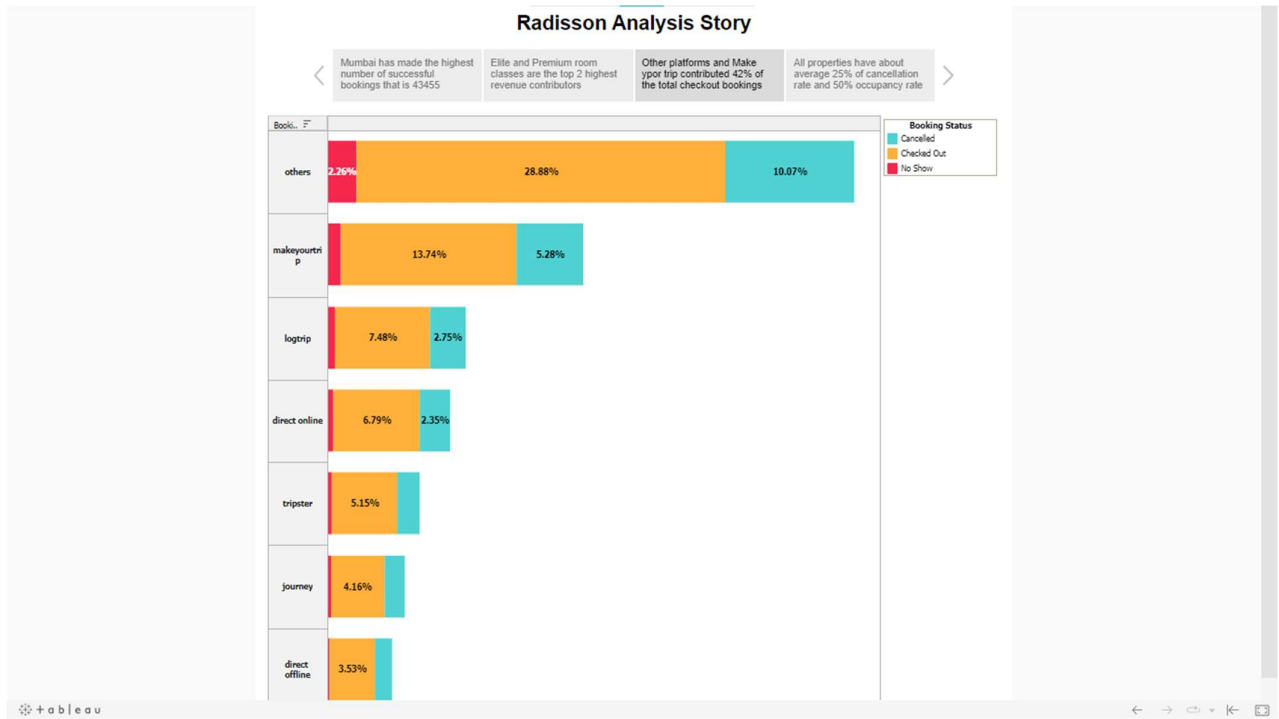


## Stories:

# Project Report



# Project Report



hotel\_Radisson\_analysis\_story | T x B Radisson Hotel x - Student x +

public.tableau.com/app/profile/hirushikeshan.a/viz/hotel\_Radisson\_analysis\_story/RadissonAnalysisStory

hotel\_Radisson\_analysis\_story by Hirushikeshan A

**Radisson Analysis Story**

Mumbai has made the highest number of successful bookings that is 43455

Elite and Premium room classes are the top 2 highest revenue contributors

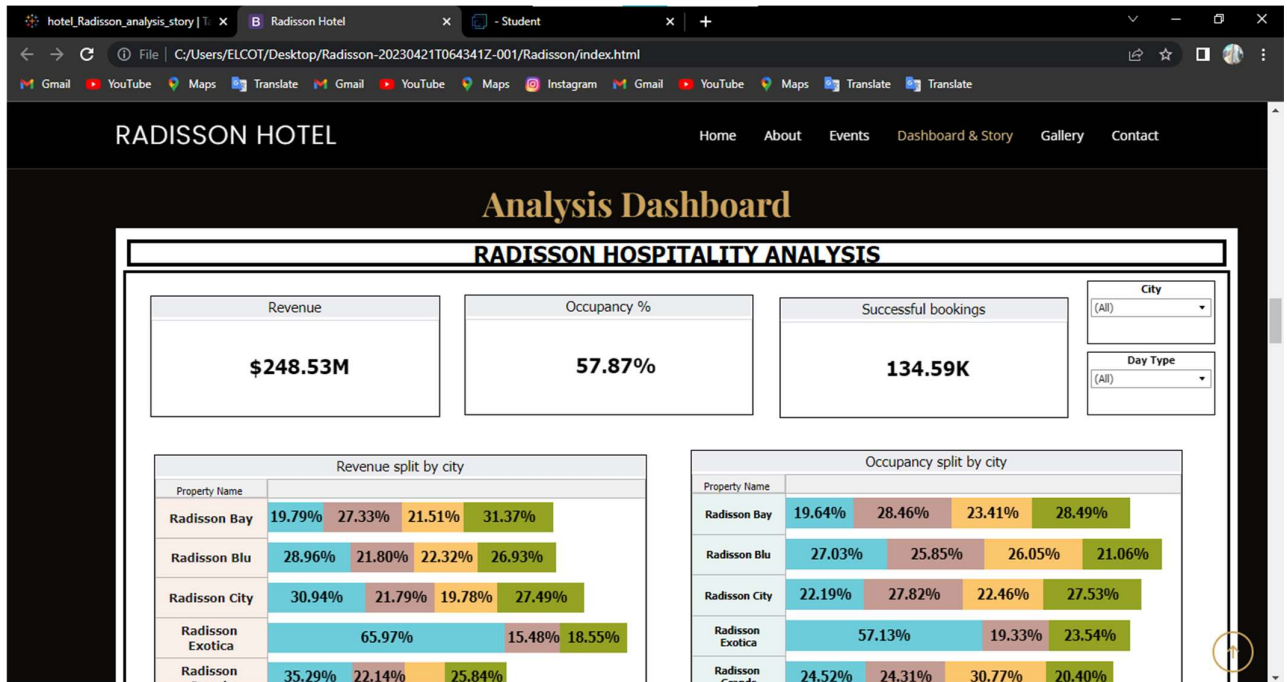
Other platforms and Make your trip contributed 42% of the total checkout bookings

All properties have about average 25% of cancellation rate and 50% occupancy rate

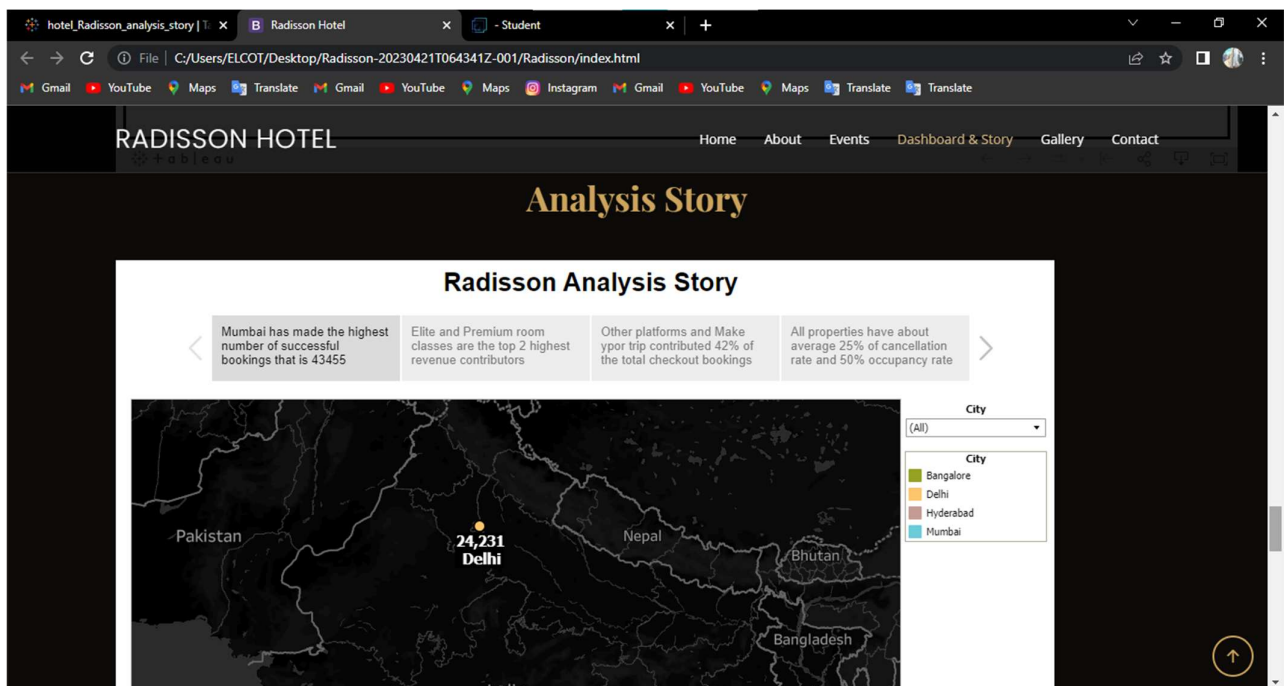
Property Id (Hotels)	revenue	Capacity	Successful Bookings	Occupancy %	Cancelled Booking %	City
16562	\$8.08M	9,016	4,820	53.46%	29.89%	(All)
17562	\$7.43M	7,636	3,424	44.84%	28.06%	
18562	\$10.26M	11,132	7,333	65.87%	26.40%	
19562	\$11.78M	8,832	5,812	65.81%	20.66%	
16561	\$8.46M	6,716	4,418	65.78%	26.65%	
17561	\$10.98M	7,820	5,183	66.28%	22.52%	
18561	\$8.26M	9,844	6,458	65.60%	26.26%	
19561	\$10.21M	10,764	5,736	53.29%	25.19%	
16560	\$8.24M	8,740	4,693	53.70%	23.61%	
17560	\$12.89M	11,316	6,013	53.14%	24.83%	
18560	\$9.08M	10,038	6,638	66.19%	24.12%	
19560	\$11.49M	9,108	5,979	65.65%	23.61%	
16559	\$17.44M	11,132	7,338	65.92%	24.77%	
17559	\$13.74M	9,292	6,142	66.10%	24.45%	
18559	\$7.32M	11,776	5,256	44.63%	23.74%	
19559	\$8.77M	8,740	4,705	53.83%	24.89%	
16558	\$5.27M	4,784	3,153	65.91%	24.78%	
17558	\$11.12M	9,384	5,036	53.67%	27.27%	
18558	\$6.98M	8,372	4,475	53.45%	25.64%	
19558	\$8.14M	9,844	4,371	44.40%	23.66%	
16563	\$13.42M	10,764	7,147	66.40%	24.06%	
17563	\$14.45M	9,568	6,337	66.23%	26.90%	
18563	\$6.61M	8,924	4,728	52.98%	24.93%	
19563	\$9.23M	10,120	5,413	53.49%	26.95%	
17564	\$8.90M	8,924	3,982	44.62%	24.91%	

**Web Integration: Dashboard & Story embed with UI with Flask**

**Dashboard:**



## Story:



## 4 ADVANTAGES & DISADVANTAGES

### Advantages:

- Real-time data analytics help optimize operations and improve guest experience



- The hospitality industry is growing rapidly and performance data helps your business stay competitive
- Intelligent technology and predictive maintenance help monitor and optimize energy consumption
- Tracking key performance indicators (KPIs) helps hotel owners make effective decisions based on past performance
- Data analytics can improve productivity, efficiency and profitability in the hospitality industry

**Disadvantages:**

- Lack of power measurement is prone to false positive or false negative results
- Without tracking key performance indicators (KPIs), it is difficult to make effective decisions based on past performance
- Lack of real-time data analytics can lead to poor inventory management and waste
- Service and guest experience cannot be improved without data analytics
- High turnover and low retention rates can occur without proper workforce management, which can be improved with performance data

**5 APPLICATIONS**

- Track key performance indicators (KPIs) to make effective decisions based on past performance
- Use AI and data science to improve revenue management, operational analytics, and energy consumption management
- Deliver consistent customer experiences, integrate data from multiple channels, and target marketing with data analytics
- Keeping up with trends and staying competitive in a constantly evolving market environment
- Use data analytics to increase revenue, save costs and optimize hotel operations

**6 CONCLUSIONS**

Capturing and analyzing performance data in the hospitality industry at Radisson offers several benefits, including:



- Make effective decisions based on past performance and performance
- Identifying key performance indicators (KPIs) that can be tracked and analyzed on a regular basis can provide a strong foundation for business decisions and success.
- Improving revenue management, operational analytics, and energy consumption management using AI and data science
- Stay competitive and keep up with fast-growing industry trends
- Increase business value and improve financial performance

## 7 FUTURE SCOPE

It uses data analytics to analyze demand and customer behavior patterns to help hotels effectively manage guest influx. Continuous tracking of key performance indicators (KPIs) to make effective decisions based on past performance and success. Use AI and data science to improve revenue management, operational analytics, and energy consumption management. Create business value by using big data analytics to improve financial performance and other aspects of hotel performance. Ability to understand customers, customers and operations in greater detail through business data analytics.

## 8 APPENDIX

- [Tableau public link for Hirushikeshan A](#)
- [Source code](#)