

PROJECT DOCUMENTATION

ANALYZING THE PERFORMANCE AND EFFICIENCY OF THE RADISSON HOTELS USING DATA VISUALIZATION TECHNIQUES

INTRODUCTION

Overview:

The hotel industry is a broad category of businesses that provide lodging services for travelers and tourists. This can include a wide range of establishments, from luxury resorts to budget-friendly motels, as well as extended stay hotels, boutique hotels, and more. Hotels can be found in nearly every corner of the world, and are often a major component of the tourism and travel industry in a given area. Radisson owns multiple five-star hotels across India.

They have been in the hospitality industry for the past 100 years. Due to strategic moves from other competitors and ineffective decision-making in management, Radisson is losing its market share and revenue in the luxury/business hotels category. As a strategic move, the managing director of Radisson wanted to incorporate Business and Data Intelligence in order to regain their market share and revenue. Our task is to create an analytics dashboard & story to provide them insights to make better business decisions.

Purpose:

The company's goal is to provide food, shelter, and a better future for children and at-risk youth. Radisson Hotel Group encourages all of its hotels to support corporate and other local partners in this scope.

PROBLEM DEFINITION AND DESIGN THINKING

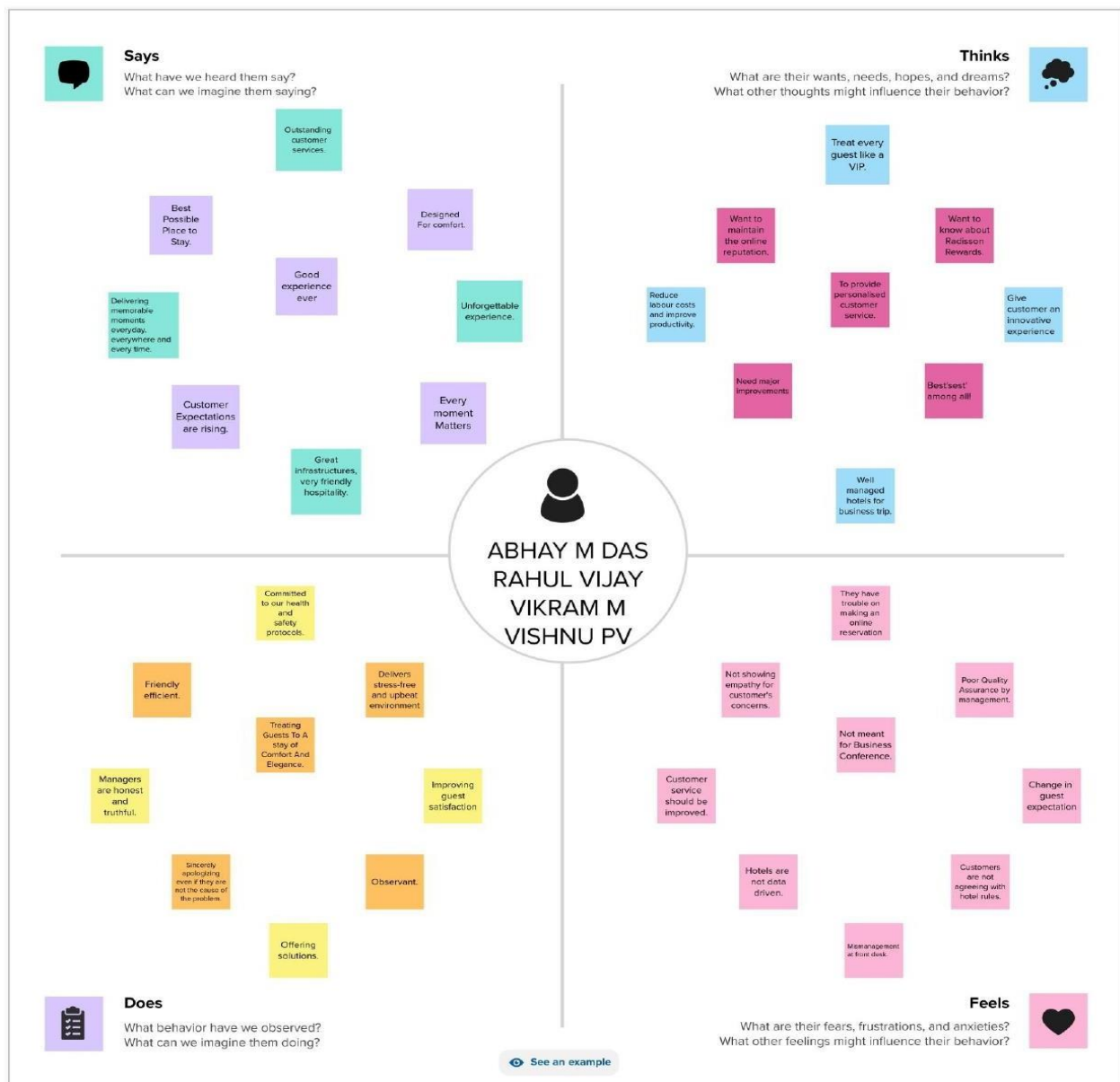
Empathy Map:

Creating empathy with your users is one of the most important things you can do from both a business and a user experience perspective. Understanding the motivations, frustrations, and actions of your principal user is critical to targeting them effectively and providing sustainable solutions for their problems. Creating empathy, while not a trivial task, is easiest to accomplish via creating an empathy map.

An empathy map is a template that organizes a user's behavior's and feelings to create a sense of empathy between the user and your team. The empathy map represents a principal user and helps teams better understand their motivations, concerns, and user experience.

There are four quadrants to a traditional empathy map. These are: Does, Thinks, Says, and Feels. These quadrants will all ask unique questions about how you can analyse the perspective of the user and what they accomplish in their daily use. These can be completed in any order as long as they all take each other into consideration and are not chronological.

Empathy map for Radisson Hotels:



Ideation and Brainstorming Map:

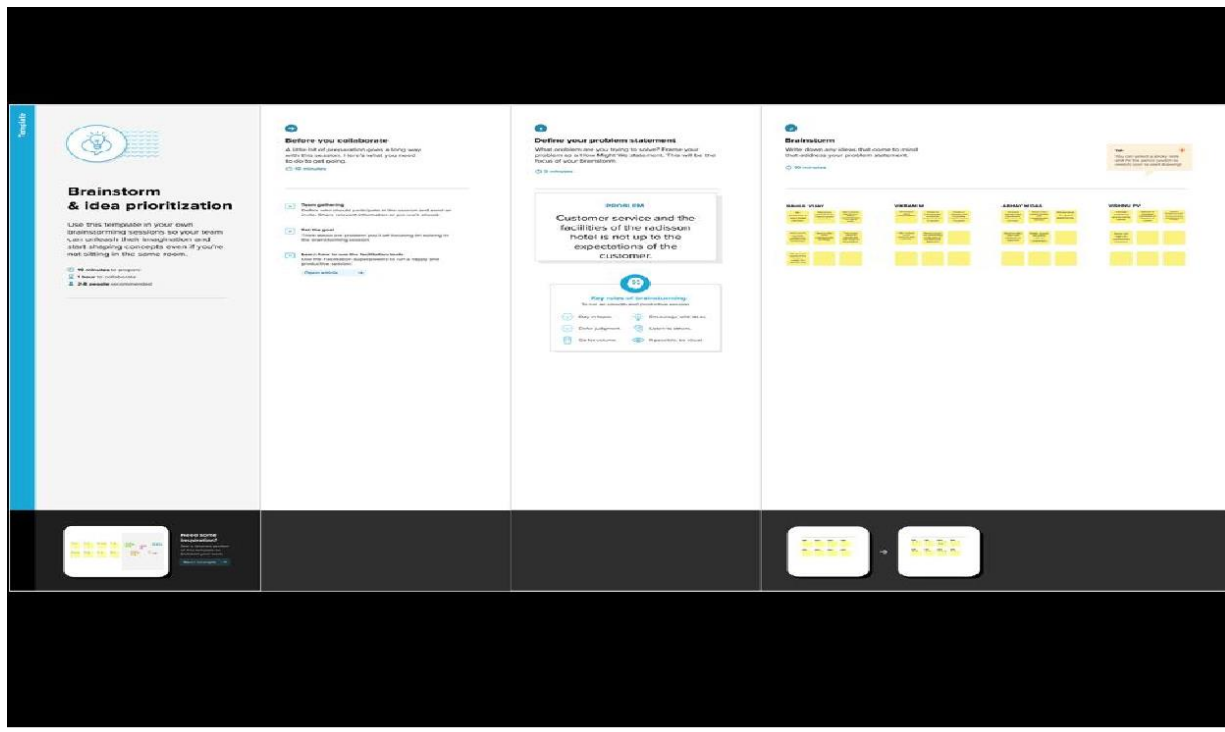
Ideation is the process of forming ideas from conception to implementation, most often in a business setting. Ideation is expressed via graphical, written, or verbal methods, and arises from past or present knowledge, influences, opinions, experiences, and personal convictions.

Brainstorming is a group problem-solving method that involves the spontaneous contribution of creative ideas and solutions. This technique requires intensive, freewheeling discussion in which every member of the group is encouraged to think aloud and suggest as many ideas as possible based on their diverse knowledge.

Brainstorming combines an informal approach to problem-solving with lateral thinking, which is a method for developing new concepts to solve problems by looking at them in innovative ways. Some of these ideas can be built into original, creative solutions to a problem, while others can generate additional ideas.

Common methods of brainstorming include mind mapping, which involves creating a diagram with a goal or key concept in the centre with branches showing subtopics and related ideas; writing down the steps needed to get from Point A to Point B; "teleporting" yourself to a different time and place; putting yourself in other people's shoes to imagine how they might solve a problem; and "super storming," or using a hypothetical superpower such as X-ray vision to solve a problem.

Ideation And Brain storming for Radisson Hotels:



1

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

20 minutes

TIP

Add a customer tag to sticky notes to make it easier to find, remove, separate and categorize important ideas as shared within your team.

FINDING PROBLEM

The hotels needs to identify the root cause of the problem.

RADISSON MANAGEMENT

Radisson Management should consider their policy of minimum training and experiences o

FOOD FACILITIES

Maintain the quality of the food and supply the food on time

CUSTOMER SERVICE

Handle customer complaints, provide appropriate solutions and alternatives within the time lin

HOTEL TECHNOLOGY

Maximizing technology to improve guest experience.

FREEBIES

Need to offer guests freebies and complimentary service

HOTEL ROOMS

Rooms should be comfortable in the view of furniture and Bathroom

2

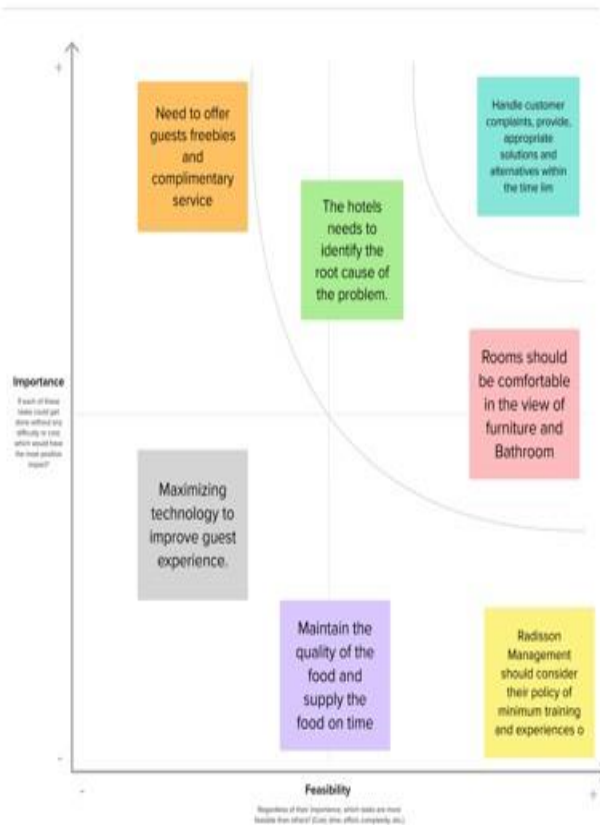
Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

TIP

Participants can use their markers to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the M key on the keyboard.



RESULT Output of my project:

- Mumbai has made highest No of successful Bookings- 44,455.
- Elite and Premium room classes are the top two highest revenue contributors
- Other platforms and make your trip contributed 45% of the total checked out bookings.
- ALL properties have about 25% cancellation rate and 50% occupancy rate.



Figure 1 consists of two panels. The left panel is a map of India with major cities labeled: Delhi (24,321), Mumbai (45,400), Hyderabad (34,000), Bangalore (32,016), Chennai, Kolkata, and New Delhi. The right panel is a bar chart titled 'Successful Booking dates'. The x-axis represents dates from May to July. The y-axis represents the number of successful bookings. The chart shows a repeating pattern of peaks and troughs for each city, with Mumbai having the highest bookings and Bangalore the lowest.



Stacked bar chart showing the distribution of booking status for different travel categories. The categories are: others, makeyourtrip, logix, direct online, tripura, and journey. The booking status is categorized into: Cancelled (blue), Cancelled Not (orange), and No Show (green).

Category	Cancelled Not (%)	Cancelled (%)	No Show (%)
others	28.67%	10.18%	6.15%
makeyourtrip	13.00%	4.99%	1.01%
logix	7.74%	2.60%	0.66%
direct online	6.98%	2.99%	0.03%
tripura	5.00%	1.00%	0.00%
journey	4.25%	1.25%	0.00%



ADVANTAGES AND DISADVANTAGES:

Advantages:

- Technologies are maximized for guest experience.
- The quality of food is increased.
- They have offered some amenities free of charge.
- The hotels have identified the root cause of the problem. ▪ The Hotels have handled customer complaints and provide appropriate solutions.

Disadvantages:

- Radisson Group is planning to change its position and rebrand itself for which the budget allocated is 200 million dollars. At a time when hotels are experiencing cost management issues, this may not be the best choice.
- Radisson Group is looking to expand its operations further into the Asia Pacific and this will also be accompanied by a re organization and changes in leadership. This will mean lots of costs and could cost the business. The restructuring and change in leadership might also require the need to shift the organizational culture, which could be difficult.
- Radisson Group has under its portfolio eight distinct hotel brands spread across eight segments and operating across over 73 nations spread across different continents. This widespread is creating unison between the categories of hotels and sub-brands. This also confuses customers who are expecting the same quality of service at every Radisson hotel but does not be aware that it can vary in accordance with the market segment that the sub-brand service.

APPLICATIONS:

The solutions can be applied in

- * Business Conferences
- * Customer services
- * Room facilities
- * Food Qualities
- * Modern Techniques
- * Hiring and retaining the staff
- * Rising cost of daily consumables

- * Irregular cash flows
- * Data security Challenges
- * Restoring business post crisis.

CONCLUSIONS:

Our project title is “Analysing the performance and efficiency of the Radisson hotels using data visualization techniques”. I am Abhay M Das (team leader) and my team members are Rahul Vijay, Vikram M and Vishnu PV. Our first task is Empathy Map. we done this with the help of Mural App and with the ideas of myself and my team members. Our next task is Brainstorm, we done this with the help of mural app. It is a group solving method and as a group we have done this by providing solutions to the problems. Third task is Data set. We are provided with certain datasets of India by 20-22 analysis on Radisson Hotels. Next we have uploaded this datasets in to Mysql Workbench. With the help of this data sets we created Dashboard and Story, that is our next task. First we have created a tableau account and connect the data with tableau. The next step is Data Visualization. The number of unique visualizations that we created with a given data set are Revenue Split by City, Occupancy split by city, Occupancy by day type, Revenue by room class, Booking % by platform, Property by key metrics, Revenue contribution % by category, Successful Bookings by data wise, Total Revenue for the hotels, Total Successful Bookings and Occupancy in %. Once we created views on different sheets in tableau we pull them in to a dashboard. Like wise we done story too. Mumbai has made highest No of successful Bookings- 44,455. Elite and Premium room classes are the top two highest revenue contributors. Other platforms and make your trip contributed 45% of the total checked out bookings. ALL properties have about 25% cancellation rate and 50% occupancy rate. These are the outputs of my project. After creating story and dashboard we published it in to a tableau public and downloaded it as a pdf. Next we write html program, connected the embedded code of both story and dashboard in the html program and run it and save it in a computer. Thus we completed our project.

FUTURE SCOPE:

The launch of the new website as well as its new guest-facing app are part of the company’s five-year strategic plan, announced last year, which includes a strong digital transformation component, including investments into new platforms and technology.

The goal of Radisson hotels is to simplify and personalize the guest experience from the point of reservation through check-out. The enhancement to be made in the future is that, to be the company of choice for guests, owners and talent.

DOCUMENTATION

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