**ANALYSING THE PERFORMANCE & EFFICIENCY OF THE RADISSION HOTELS USING DATA VIDUALIZATION TECHNIQUES**

## Introduction:

Dynamic changes in the technology , the struggle for the customer  and increased competition forced the hotel enterprises consider the entire marketing activities in a significant ways .

In the current economic context, hotel generate, disseminate the use innovation in order to gain or maintain long-tem competetive advantage. Therefore, is a need for  the detailed analysis of hotel services innovation.one of the most important   elements of successful hotel and  flawless guest experience is having efficient hotel operating system. Analysis help mine and interpret data while structuring the data into data format that is easy to understand and applicable.

Problem defining and design thinking:

### Empathy Map:

An empathy map is a tool that brings to light to your most likely customers. It teaches you how to connect with the people who will consume your content, products, or services. Typically divided into quadrants of say, think, do, and feel, the empathy map is intended to get into the head—and heart—of the customer.

### Brainstorming Map:

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.

### ADVANTAGES OF ANALYSING:

- Personalize the  costumer Experience and Examine previous booking patterns to help increase future occupancy rates.

- Compare pricing with competitors to develop an effective pricing strategy.

- Analysing the data would be able to plan better marketing strategies to attract costumer.

- By analysing guest spending behaviour to identify most profitable segments.

- Better decision-making, customer and improved operational efficiency.

- Analytics provides the ability to move accurately predict demand optimize pricing startegies, target and marketing mor precisely and improve the customer experience.

### Application:
Analyzing the performance and efficiency of Radisson hotels using data visualization techniques can provide valuable insights into various aspects of the hotel's operations, including revenue, occupancy rates, customer satisfaction, and employee performance. Here are some potential applications of data visualization techniques:

- Revenue analysis: Using data visualization tools such as line charts, bar charts, and heat maps, you can analyze the revenue trends of Radisson hotels over time, identify the sources of revenue, and pinpoint the areas where revenue is highest or lowest. This information can help hotel management make informed decisions about pricing strategies, promotions, and revenue management.

2. Occupancy analysis: Data visualization techniques can help you analyze the occupancy rates of Radisson hotels, including trends over time, seasonality, and occupancy rates by room type. This information can help hotel management optimize room rates and occupancy levels, as well as identify opportunities for upselling and cross-selling.

3. Customer satisfaction analysis: Data visualization tools can be used to analyze customer satisfaction scores across different Radisson hotels, identify trends and patterns, and pinpoint areas where improvements can be made. This information can be used to improve customer service and loyalty, as well as identify opportunities for revenue growth.

4. Employee performance analysis: Data visualization techniques can be used to analyze employee performance metrics, such as guest satisfaction scores, employee turnover rates, and employee productivity. This information can be used to identify areas for employee training and development, as well as to optimize staffing levels and improve employee engagement.

5. Overall, data visualization techniques can provide valuable insights into the performance and efficiency of Radisson hotels, enabling management to make data-driven decisions and improve the overall customer experience.

### TABLEAU:

Tableau is a powerful data visualization and business intelligence software that allows users to connect, visualize, and share data in a way that makes it easier to understand and analyze. With Tableau, users

can create interactive dashboards, charts, and graphs from various data sources, including spreadsheets, databases, and cloud services.

Tableau offers a user-friendly drag-and-drop interface, which enables users to create custom visualizations and perform advanced analytics without requiring extensive technical skills. The software also provides powerful data blending capabilities, which allow users to combine multiple data sources into a single view, making it easier to identify patterns and trends.

Tableau is used by businesses, government agencies, and non-profit organizations to make better decisions based on data-driven insights. Some of the key features of Tableau include real-time collaboration, mobile accessibility, and the ability to embed visualizations into websites and applications.

Tableau offers various pricing options for its products, including a free version, Tableau Public, which allows users to create and share public visualizations with a global community. Other paid versions include Tableau Desktop, Tableau Server, and Tableau Online, which provide more advanced features and capabilities for enterprise-level organizations.

## ADVANTAGES OF TABLEAU:

### Advantages of Tableau:

1. User-friendly interface: Tableau has a simple drag-and-drop interface that is easy to use and requires minimal training, making it accessible to users of all technical levels.

2. Interactive visualizations: Tableau offers interactive dashboards and charts that allow users to explore data and gain insights in real-time.

3. Data integration: Tableau can connect to various data sources and blend them into a single view, enabling users to work with large and complex datasets.

4. Fast performance: Tableau's in-memory technology enables fast performance and real-time analytics, even with large datasets.

5. Collaboration: Tableau offers real-time collaboration and sharing, allowing users to work together on a project and share insights with others.

## DISADVANTAGES OF TABLEAU:

1. Cost: Tableau can be expensive, particularly for larger organizations that require more advanced features and capabilities.

2. Limited customization: Tableau's visualizations and dashboards are customizable to a certain extent, but they may not meet the specific needs of some users or organizations.

3. Data security: Tableau's cloud-based solutions may raise concerns about data security and privacy for some organizations.

4. Learning curve: While Tableau's interface is user-friendly, there is still a learning curve associated with learning how to use the software effectively.

5. Limited data modeling: Tableau's data modeling capabilities are limited, which may make it more difficult for some users to work with complex data structures.

## FUTURE SCOPE:

Analyzing the performance and efficiency of Radisson hotels using data visualization techniques can provide valuable insights into their operations and help identify areas for improvement. Here are some potential future scopes for this type of analysis:

1. Identifying trends in occupancy rates: Data visualization can help identify trends in occupancy rates at Radisson hotels, allowing management to adjust room rates and promotions to maximize occupancy and revenue.

2. Analyzing customer satisfaction ratings: By analyzing customer satisfaction ratings, Radisson hotels can identify areas where they are excelling and areas where they need to improve. This information can be used to tailor marketing campaigns and training programs for employees.

3. Comparing performance across locations: Data visualization techniques can also be used to compare the performance of different Radisson hotels across various metrics, such as occupancy rates, revenue, and customer satisfaction. This can help identify best practices that can be shared across locations and areas for improvement.

4. Tracking operational efficiency: By analyzing data on employee productivity, maintenance costs, and other operational metrics, Radisson hotels can identify areas where they can increase efficiency and reduce costs.

Overall, the future scope of analyzing the performance and efficiency of Radisson hotels using data visualization techniques is vast and can provide valuable insights that can be used to optimize their operations, improve customer satisfaction, and increase revenue.

## CONCLUSION:

In conclusion, data visualization techniques can provide valuable insights into the performance and efficiency of Radisson hotels. By analyzing key metrics such as occupancy rate, RevPAR, ADR, customer satisfaction scores, and employee turnover rate, hotel managers can identify areas for improvement and make data-driven decisions.

Different types of visualizations such as bar charts, line charts, scatter plots, heat maps, and pie charts can be used to identify trends and patterns, compare performance across different hotels, and understand the distribution of data across geographic regions.

Ultimately, using data visualization techniques can help Radisson hotels improve their profitability and customer satisfaction, and stay competitive in the hospitality industry.