CHAPTER 1

INTRODUCTION

1.1 PROJECT OVERVIEW

Analyzing the performance and efficiency of Radisson Hotels through data visualization is an essential process for stakeholders, management, and investors seeking insights into the company's operations. In this era of data driven decision-making, data visualization provides a powerful tool to transform raw data into actionable insights, enabling us to assess the strengths and weaknesses of Radisson Hotels' operations and identify areas for improvement.

This analysis will leverage data from various sources, such as financial records, customer reviews, occupancy rates, and operational metrics. By presenting this data visually, we can create a comprehensive picture of Radisson Hotels' performance. This not only simplifies the interpretation of complex information but also facilitates communication to a broader audience. Visualizing operational metrics like staff-to-guest ratio, room turnover time, and maintenance costs can offer insights into how efficiently Radisson Hotels manage their properties.

Benchmarking Radisson Hotels against competitors through various data visualization techniques, such as radar charts or stacked bar charts, can reveal areas where they excel or lag behind. Displaying sustainability metrics through visual aids can illustrate the company's commitment to environmental responsibility, such as reductions in energy consumption and waste generation.

Visualization of social media metrics, including likes, shares, and comments, can offer insights into brand engagement and the impact of marketing efforts.By utilizing data visualization, we aim to uncover actionable insights that can drive informed decision-making within Radisson Hotels. It's important to note that data visualization is a dynamic process, and the choice of visualization methods will depend on the specific data, questions, and goals of the analysis. This study will provide a comprehensive view of Radisson Hotels' performance and efficiency, ultimately guiding the company towards further success and sustainability in the competitive hospitality industry.

1.2 PURPOSE

The purpose of analyzing the performance and efficiency of Radisson Hotels using data visualization is to gain valuable insights and make data-driven decisions that can benefit the company in several ways. Data visualization allows us to highlight areas where Radisson Hotels excel and where they may be underperforming. This information helps management focus on strengths and address weaknesses to improve overall performance.

By visualizing operational metrics, Radisson Hotels can identify bottlenecks, inefficiencies, or areas where resources may be misallocated. This can lead to cost savings and more effective resource management.Analyzing customer reviews and feedback through data visualization helps Radisson Hotels understand customer sentiments and preferences. This information can guide improvements in services and amenities to enhance guest satisfaction.

Visualization of financial data can assist in making informed financial decisions. It can help management allocate resources effectively, set budgets, and evaluate the impact of financial strategies on the company's bottom line. Geographic data visualization can guide decisions regarding where to expand or invest in new properties, helping the company grow its market presence strategically. Comparing Radisson Hotels' performance with competitors using data visualization can reveal opportunities to outperform the competition, adapt to industry trends, and benchmark the effectiveness of various strategies.

Analyzing social media and online engagement through data visualization can help Radisson Hotels assess the effectiveness of marketing campaigns and branding efforts. This insight can inform future marketing strategies.Data visualization not only provides insights at a particular point in time but also helps monitor progress over time. Radisson Hotels can use this information for ongoing performance improvement and adaptation to changing market conditions.

In summary, the purpose of analyzing Radisson Hotels' performance and efficiency through data visualization is to inform strategic, operational, and tactical decisions that drive the company's success and sustainability in the competitive hospitality industry. Data visualization serves as a powerful tool for transforming complex data into actionable insights that can lead to positive changes and improvements within the organization.

CHAPTER 2

LITERATURE SURVEY

2.1. EXISTING PROBLEM:

- ➢Staffing Shortages: Many hotels have faced staffing shortages, particularly in the hospitality industry, which can lead to decreased service quality and longer wait times for guests.

➢Health and Safety Concerns: The COVID-19 pandemic has introduced new health and safety challenges, including implementing strict sanitation protocols and adhering to changing health regulations.

➢Maintenance and Repairs: Maintaining the physical condition of the hotel, including guest rooms, public areas, and infrastructure, can be a recurring challenge.

➢Online Reputation Management: Managing online reviews and ratings is essential, as negative reviews can impact a hotel's reputation and bookings.

➢Competition: Staying competitive in the hospitality industry is an ongoing challenge, as hotels must continuously adapt to changing customer preferences and market trends.

➢Security and Safety: Ensuring the safety of guests and their belongings is a top priority, and hotels must address issues related to theft, unauthorized access, or other security concerns.

➢Sustainability and Environmental Concerns: Many hotels are working to reduce their environmental footprint by implementing sustainable practices and reducing energy consumption.

➢Technology Integration: Keeping up with technology trends and providing guests with modern amenities can be challenging, especially for older or smaller hotel properties.

➢Supply Chain Disruptions: Issues related to the availability and cost of supplies, including food and linens, can impact operations.

➢Guest Satisfaction: Maintaining a high level of guest satisfaction and personalized service is an ongoing challenge in the hotel industry.

2.2. REFERENCES

2.4 PROPOSED SOLUTION

Establish a centralized data warehouse to collect and store data from various sources, including financial records, occupancy rates, customer feedback, and operational metrics. Implement Extract, Transform, Load (ETL) processes to ensure data integrity, quality, and consistency as it is extracted from source systems and loaded into the data warehouse.Integrate real-time data streams from property management systems, customer feedback platforms, and other relevant sources to provide up-to-the-minute insights.

Choose industry-leading data visualization tools like Tableau, Power BI, or custom-built dashboards, depending on the specific needs and capabilities of Radisson Hotels. Define a set of KPIs tailored to Radisson Hotels' objectives, including financial performance, occupancy rates, customer satisfaction scores, sustainability metrics, and operational efficiency measures. Create customized dashboards for various stakeholders, including management, operations teams, and property managers, to present KPIs and relevant metrics in a clear and intuitive manner.

Develop sustainability dashboards to visually represent environmental and social responsibility metrics, such as energy consumption, waste reduction, and sustainable sourcing, to showcase the company's commitment to sustainability. Implement robust data security measures, including encryption and access controls, to protect sensitive information and comply with data privacy regulations. Establish a feedback loop to collect input from users, property managers, and stakeholders to continuously enhance and evolve the data visualization solution.

Continuously test and update the system to ensure compatibility with various browsers and devices and integrate with other software systems as needed.By implementing this proposed solution, Radisson Hotels can centralize and analyze its data efficiently, promote data-driven decision-making, enhance operational efficiency, and improve the guest experience. This approach will empower Radisson Hotels to maintain a competitive edge in the dynamic hospitality industry and position the company for sustainable growth and success.

2.3 PROBLEM STATEMENT

Radisson Hotels, a prominent player in the hospitality industry, is facing the challenge of efficiently analyzing its performance and enhancing operational efficiency. The company operates numerous properties worldwide, and effective data analysis is essential to remain competitive, deliver exceptional guest experiences, and drive sustainable growth. However, Radisson Hotels currently lacks a comprehensive and data-driven approach to assess and optimize its performance.

The primary objectives of this analysis are todevelop a system to integrate and centralize data from various sources, including financial records, occupancy rates, customer reviews, and operational metrics.Implement tools and processes for real-time data analysis to provide timely insights and support swift decision making.Analyze customer feedback through sentiment analysis and data visualization to improve customer experiences and satisfaction.

Use data visualization to showcase the company's commitment to environmental and social responsibility, attracting eco-conscious guests and investors. Encourage a data-driven decision-making culture within Radisson Hotels to foster a deeper understanding of the value of data analysis.

This analysis will encompass the entire Radisson Hotels organization, spanning its global properties, and will involve a comprehensive approach to data integration, analysis, and visualization. The scope also includes the identification of key performance indicators (KPIs) and the development of dashboards to present the findings in an accessible and actionable manner.

Addressing these challenges and achieving the objectives will empower Radisson Hotels to make informed decisions, optimize operations, enhance guest experiences, and maintain a competitive edge in the dynamic and highly competitive hospitality industry. By adopting a data-driven approach, Radisson Hotels can achieve sustainable growth, maximize operational efficiency, and provide exceptional service to its guests.

CHAPTER 3

IDEATION AND PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS

Stakeholder: Data Analyst or Data Scientist

What they Say: "We need a centralized system to integrate data

efficiently." What they Think: "Real-time data analysis can provide

valuable insights."

What they Feel: Frustration with data silos and excitement about the potential of data visualization.

Stakeholder: Hotel Management and Operations Teams

What they Say: "We want data that helps us optimize operations."

What they Do: Engage with data visualizations to make informed operational decisions.

Stakeholder: Marketing Team

What they Say: "We need to understand market trends and guest preferences."What they Think: "Competitive benchmarking is essential for marketing strategies."

What they Do: Analyze marketing data visualizations to refine

strategies. Stakeholder: Guest Relations and Customer Service Teams

What they Say: "Customer feedback should guide service improvements."

What they Do: Monitor sentiment analysis and feedback dashboards to improve services.
Stakeholder: Hotel Guests and Customers

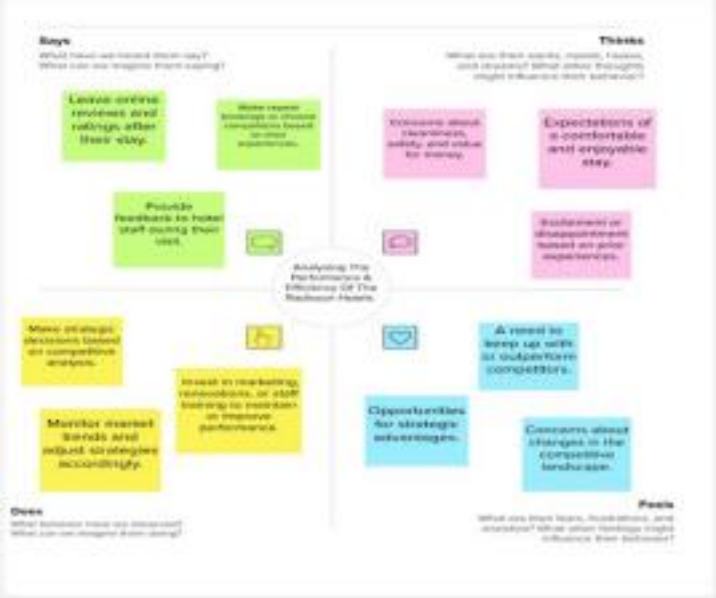
What they Say: "We want seamless and personalized experiences."

What they Think: "Hotels should adapt to our preferences and provide sustainable services."

What they Feel: High expectations for quality and sustainability.

What they Do: Provide feedback and expect exceptional service.

Understanding the perspectives, needs, and emotions of these stakeholders through an empathy map canvas will help in developing data visualization solutions that cater to their specific requirements and ultimately drive the successful analysis of Radisson Hotels' performance and efficiency. This tool can aid in creating user-centric data visualization systems that meet both internal and external expectations.



3.2
Brainstorming and Ideation

Data Sources and Integration:

- ➢ Identify all relevant data sources within Radisson Hotels, including financial records, occupancy data, customer feedback, sustainability reports, and marketing data.
- ➢Brainstorm methods to integrate these data sources into a centralized data warehouse.

Key Performance Indicators (KPIs):

- ➢Define a comprehensive list of KPIs that are critical to assessing the performance and efficiency of the hotels. These may include revenue, occupancy rates, customer satisfaction scores, sustainability metrics, and more.

Data Visualization Techniques:

➢Explore various data visualization techniques and chart types that can effectively communicate KPIs and insights. Consider the use of line charts, bar graphs, heatmaps, word clouds, and geographic maps.

Real-time Data Analysis:

➢Brainstorm ways to implement real-time data analysis, such as streaming analytics, to provide immediate insights for prompt decision-making.

User-Friendly Dashboards:

➢Ideate user-friendly dashboard designs that cater to different stakeholders, making it easy for them to interact with and interpret visualized data.

Sustainability Visualization:

➢Explore creative ways to visually represent sustainability efforts, such as using tree maps to show energy consumption reduction or interactive maps highlighting sustainable practices across properties.

Competitive Benchmarking:

➢Consider how visualizations can be used to compare Radisson Hotels' performance with that of competitors, identifying areas of strength and opportunities for improvement.

Sentiment Analysis:

➢Brainstorm ways to conduct sentiment analysis on customer reviews and use visualization to present the findings. Word clouds, sentiment trend lines, and sentiment distribution charts are potential ideas.

Alerting and Notifications:

➢Ideate a system for setting performance thresholds and generating alerts and notifications for stakeholders when KPIs deviate significantly from expectations.

Feedback Mechanism:

➢Brainstorm ways to gather and incorporate feedback from users and stakeholders to continuously enhance the data visualization system.

Marketing and Branding:

- ➢Consider how data visualization can be used to support marketing efforts, enhance the Radisson brand image, and attract eco-conscious guests and investors.

CHAPTER 4

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

Data Integration:

- ➢Implement data cleaning and preprocessing procedures to ensure data quality and consistency.

Data Storage and Management:

- ➢Set up a robust database system to store and manage the integrated data efficiently.
- ➢Create a data warehouse to facilitate data retrieval and analysis.

Visualization Tools and Platforms:

- ➢Choose appropriate data visualization tools and platforms that support a wide range of chart types and interactive features.
- ➢Ensure that the selected tools are compatible with the data sources and can handle real-time data if needed.

Data Visualization Requirements:

- ➢Define the types of charts and graphs needed, such as bar charts, line charts, heatmaps, scatter plots, and geographic maps.
- ➢Specify the level of interactivity required, including zooming, filtering, and drill-down capabilities.

Data Access and User Permissions:

➢Define user roles and permissions for accessing and interacting with data visualization too

➢Implement security measures to protect sensitive data and ensure compliance with data privacy regulations.

Dashboard Design:

➢Design the layout and structure of dashboards to present key performance indicators (KPIs) and metrics clearly and intuitively.

➢Incorporate Radisson Hotels' branding elements to maintain a consistent visual identity.

Data Aggregation and Granularity:

➢Define the time intervals (daily, weekly, monthly, etc.) for data aggregation and visualization.

➢Determine the level of detail to be displayed in visualizations

Performance Metrics:

➢ Key Performance Indicators (KPIs): Identify the specific KPIs to be visualized, such as revenue, occupancy rates, customer satisfaction scores, and sustainability metrics.

Integration with External Data:

➢If applicable, specify requirements for integrating external data sources, such as data on competitors' performance and market trends.

Export and Sharing:

➢Determine the formats for exporting data and visualizations ➢Implement sharing features to allow stakeholders to distribute and collaborate on the visualized data.

Performance Alerts:

➢Define performance thresholds that trigger alerts or notifications if certain KPIs fall outside acceptable ranges.

➢Alert Channels: Specify the channels for delivering alerts, such as email, SMS, or mobile notifications.

User Training and Support:

➢Develop training materials and resources to help users effectively navigate and utilize the data visualization tools.

Documentation:

➢Create user documentation that outlines how to use the data visualization tools and interpret the visualized data.

Scalability:

➢Scalability Requirements: Ensure that the chosen tools and infrastructure can handle increasing data volumes and growing user demands.

Testing and Quality Assurance:

➢Develop a testing plan to verify that the data visualization tools perform as expected.

➢Implement quality control processes to identify and rectify issues or inaccuracies in the data and visualizations.

4.2 NON-FUNTIONAL REQUIREMENTS

Performance:

➢The system should provide quick response times for generating visualizations and interacting with dashboards.

➢The data visualization platform must scale seamlessly to accommodate growing data volumes and user demands.

Reliability:

- ➢Ensure high availability and minimal downtime for data visualization tools.
- ➢Implement redundancy and failover mechanisms to prevent data loss and service interruptions.

Security:

- ➢Data in transit and at rest should be encrypted to protect sensitive information.
- ➢Implement strong user authentication and authorization mechanisms to ensure that only authorized users can access and modify data visualizations.

Compliance:

- ➢Ensure that the data visualization system complies with relevant industry standards and legal regulations.

Scalability:

- ➢The system should maintain performance when under heavy load, such as during peak usage periods.

Usability:

- ➢The data visualization tools should have an intuitive and user-friendly interface to facilitate ease of use.
- ➢Ensure that the system is accessible to all users, including those with disabilities.

Interoperability:

- ➢The system should be compatible with a wide range of browsers and devices to support various user preferences.

Maintainability:

- ➢Documentation: Maintain comprehensive technical documentation for the system, including data sources, data cleaning processes, and dashboard

design guidelines.

Cost-Effectiveness:

- ➢Keep the total cost of ownership (TCO) in check, including software licensing, hardware, and ongoing maintenance expenses.

Performance Monitoring and Metrics:

- ➢Implement performance monitoring tools to track system performance, identify bottlenecks, and troubleshoot issues.

Load Handling:

- ➢Perform capacity planning to ensure that the system can handle expected loads without performance degradation.
- ➢Implement load balancing to evenly distribute traffic across multiple servers.

Data Backup and Recovery:

- ➢Regularly back up data to prevent data loss due to system failures or data corruption.
- ➢Recovery Procedures: Develop and test data recovery procedures to restore the system in case of unexpected failures.

User Training and Support:

- ➢Provide users with training resources and documentation to help them make the most of the data visualization tools.
- ➢Helpdesk and Support: Offer technical support and assistance for users encountering issues or needing guidance.

CHAPTER 5

PROJECT DESIGN

5.1.DATA FLOW DIAGRAM

5.2.USER SERVICES

• Reservation and Check-In Services:

- Online booking and reservation system.
- Express check-in and check-out services for convenience.
- Welcoming and efficient front desk staff.

• Accommodation Services:

- Room service for in-room dining.
- Housekeeping services, including daily room cleaning and turndown service.
- Maintenance services for any room-related issues.
- In-room amenities such as coffee makers, minibars, and toiletries.

• Dining and Food Services:

- On-site restaurants and bars offering a variety of cuisines and beverages.
- Breakfast buffets or room service breakfast options.
- Special dietary accommodations upon request.

• Concierge and Guest Services:

- Concierge desk for assistance with travel arrangements, local information, and recommendations.
- Luggage storage and handling services.
- Transportation services, such as airport shuttles or car rentals.

• Recreational and Wellness Services:

- Fitness centers, swimming pools, and spa facilities.
- Organized recreational activities for guests.
- Health and wellness amenities such as saunas and hot tubs.

• Business and Conference Services:

- Meeting and conference rooms with audiovisual equipment.
- Business centers with printing, copying, and fax services. - High-speed internet access for business travelers.

• Entertainment and Leisure Services:

- In-room entertainment options, including cable TV and streaming services.
- Organized events and live entertainment, such as live music or themed evenings.

• Special Services:

- Special requests and services for celebrations and events (e.g., weddings, anniversaries).
- Accessible rooms and facilities for guests with disabilities.
- Pet-friendly accommodations for travelers with pets.

• Security and Safety Services:

- 24/7 security and surveillance.
- Safe deposit boxes for guest valuables.
- Emergency response and medical assistance.

• Guest Feedback and Assistance:

- Systems for collecting guest feedback and reviews.
- Prompt resolution of guest concerns or issues.

CHAPTER 6

PROJECT PLANNING AND SCHEDULING

6.1 Technical Architecture

6.2 spiral planning and estimation

The spiral model is an iterative software development and project management approach that can be adapted for project planning in various domains, including the hospitality industry. Here's how you can apply the spiral model to plan a project for Radisson Hotel:

➢Determine the Project Objectives:

- Define the specific objectives of the project. For a Radisson Hotel project, this could be improving guest experience, increasing occupancy rates, or launching a new hotel location.

➢Identify Risks and Challenges:

- Identify potential risks and challenges that might be faced during the project. This could include market competition, regulatory compliance, or budget constraints.

➢Create an Initial Plan:

- Develop an initial project plan that outlines the project scope, goals, and high-level requirements. Determine a budget and allocate resources accordingly.

➢Risk Analysis and Mitigation:

- Assess the identified risks and develop strategies to mitigate them. This may involve conducting market research, regulatory compliance checks, or financial risk assessments.

➢Build a Prototype or Pilot:

- In the context of a hotel project, this phase could involve creating a pilot program at the hotel, testing new service offerings, or conducting a feasibility study for a new location.

➢Evaluate the Prototype:

- Collect and analyze feedback from the pilot or prototype. Assess how well it aligns with the project objectives and requirements.

➢Review and Refine:

- Based on the evaluation results, review and refine the project plan. Make necessary adjustments to address any issues or opportunities identified during the prototype phase.

➢Plan the Next Iteration

- Based on the refined plan, plan the next iteration or phase of the project. Set specific goals and objectives for this phase.

➢Execute and Monitor:

- Implement the plan for the current phase and closely monitor the progress. Ensure that the project stays on track and that any deviations from the plan are addressed promptly.

➢Repeat the Spiral:

- Continue through the spiral model by iterating through the "evaluate," "review," "refine," and "plan the next iteration" steps until the project objectives are achieved.

➢Finalize and Deploy:

- Once the project objectives are met, finalize the project and deploy the changes, improvements, or new services in the hotel.

➢Post-Implementation Review:

- Conduct a post-implementation review to assess the project's success and gather lessons learned. This information can be valuable for future projects.

6.3 spiral delivery schedule

Creating a spiral delivery schedule for a Radisson Hotel project involves breaking down the project into iterative phases, with each phase building on the knowledge and insights gained in the previous phase. Here's a simplified

example of a spiral delivery schedule for a Radisson Hotel project:

Iteration 1: Concept and Feasibility

- Phase 1: Define Objectives

Define the objectives of the hotel project.

- Phase 2: Market Research

Conduct market research to identify the target audience, competition, and market demand.

- Phase 3: Feasibility Study

Assess the feasibility of the project, including location, budget, and regulatory compliance.

Iteration 2: Planning and Design

- Phase 4: Detailed Project Planning

Develop a detailed project plan, including budget, resources, and a timeline. •

Phase 5: Architectural and Interior Design

Create architectural and interior design plans for the hotel.

Iteration 3: Prototype and Testing

- Phase 6: Pilot Program

Implement a pilot program in an existing Radisson Hotel location to test new services, technology, or processes.

- Phase 7: Guest Feedback

Collect and analyze feedback from guests participating in the pilot program.

Iteration 4: Refinement and Expansion

- Phase 8: Project Review

Review the feedback and insights from the pilot program. •

Phase 9: Plan Expansion

Based on the review, plan for the expansion of successful elements from the pilot program.

Iteration 5: Implementation and Training

- Phase 10: Full Implementation

Implement changes, improvements, or new services in the hotel. •

Phase 11: Staff Training

Train hotel staff on new procedures, technology, or services.

Iteration 6: Evaluation and Fine-Tuning

- Phase 12: Post-Implementation Review

Conduct a post-implementation review to assess the success and gather lessons learned.

- Phase 13: Fine-Tuning

Make any necessary adjustments based on the post-implementation review.

Iteration 7: Ongoing Optimization

- Phase 14: Ongoing Improvement

Continue to gather guest feedback, monitor performance, and make ongoing improvements to maintain and enhance the hotel's services.

CHAPTER 7

ADVANTAGES AND DISADVANTAGES

Advantages:

- ➢Clarity and Accessibility: Data visualization makes complex data more accessible and easier to understand for a broad audience. Visual representations of data, such as charts and graphs, provide a clear and concise way to convey information.
- ➢Insight Discovery: Data visualization can reveal insights and patterns that may not be apparent when looking at raw data. It allows for the identification of trends, correlations, and anomalies that can inform decision-making.
- ➢Quick Decision-Making: Visual data representations enable quicker decision-making. Stakeholders can grasp the key information at a glance, saving time in meetings and discussions.
- ➢Communication: Visualizations are effective tools for communicating findings and recommendations. They facilitate discussions among teams and with stakeholders, leading to more informed conversations.
- ➢Comparative Analysis: Data visualization allows for easy comparison of different performance metrics, either over time or against competitors. This can aid in benchmarking and setting performance targets.
- ➢Real-time Monitoring: With the use of interactive dashboards and real time data feeds, organizations can monitor performance metrics as they change, facilitating timely interventions and adjustments.
- ➢Enhanced Storytelling: Data visualization helps in telling a compelling story. It allows analysts to narrate the data's narrative, making it more engaging and persuasive.

Disadvantages:

- ➢Data Quality: The accuracy and quality of the data being visualized are crucial. Garbage in, garbage out. If the underlying data is flawed, visualizations can lead to incorrect conclusions.
- ➢Misinterpretation: While data visualization aims to simplify data, there's

still a risk of misinterpretation. Viewers may draw incorrect conclusions or make unwarranted assumptions based on the visuals.

➢Over-Simplification: In an effort to make data more accessible, visualizations can sometimes oversimplify complex issues. This may lead to overlooking important nuances and details.

➢Cost and Resource Intensive: Developing and maintaining data visualization tools and systems can be costly and require technical expertise. Small organizations may find it challenging to invest in such resources.

➢Bias in Visualization Choices: The person creating the visualization may introduce bias by selecting certain types of charts or emphasizing specific data points, which can skew the interpretation.

➢Limited Context: Visualizations often lack the context provided by textual or narrative descriptions. Viewers may not fully understand the significance of the data without additional explanation.

➢Data Privacy and Security: Displaying sensitive data visually can pose security risks if not handled correctly. It's important to ensure that sensitive information is appropriately protected.

➢Data Overload: While data visualization can make data more accessible, too much data or overly complex visuals can overwhelm viewers, causing them to miss critical information.

➢Technology Dependency: Data visualization tools and platforms are reliant on technology, which can be susceptible to technical issues, software updates, and compatibility challenges

CHAPTER 8

CODING

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  00;0,600;0,700;1,400;1,500;1,600;1,700|Poppins:300,300i,400,400i
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  <!-- Template Main CSS File -->
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  <!--
    =============================================
    =======
  * Template Name: Restaurantly - v3.9.1
  * Template URL: https://bootstrapmade.com/restaurantly-restaurant-
    template/
  * Author: BootstrapMade.com
  * License: https://bootstrapmade.com/license/

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</head>

<body>

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    55488 55</span></i>
        <i class="bi bi-clock d-flex align-items-center ms-4"><span>
    Mon-Sat: 10:00AM - 11:00PM</span></i>
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 <!-- <a href="index.html" class="logo me-auto me-lg-0"><img
src="assets/img/logo.png" alt="" class="img-fluid"></a>-->

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   <li><a class="nav-link scrollto" href="#about">About</a></li>
   <li><a class="nav-link scrollto"
href="#events">Events</a></li>
   <li><a class="nav-link scrollto" href="#chefs">Dashboard &
Story</a></li>
   <li><a class="nav-link scrollto"
href="#gallery">Gallery</a></li>

   <li><a class="nav-link scrollto"
href="#contact">Contact</a></li>
  </ul>
  <i class="bi bi-list mobile-nav-toggle"></i>
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</div>
</header><!-- End Header -->

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   <div class="col-lg-8">
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    <h2>Radisson Hotels is an international hotel chain
headquartered in the United States. A division of the Radisson Hotel
Group, it operates the brands Radisson Blu, Radisson RED,
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```
Radisson Collection, Country Inn & Suites, and Park Inn by
Radisson, among others.</h2>

    </div>
    <div class="col-lg-4 d-flex align-items-center justify-content-
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delay="200">
      <a href="https://www.youtube.com/watch?v=u6BOC7CDUTQ"
class="glightbox play-btn"></a>
    </div>

   </div>
  </div>
</section><!-- End Hero -->

<main id="main">

  <!-- ======= About Section ======= -->
  <section id="about" class="about">
   <div class="container" data-aos="fade-up">

     <div class="row">
       <div class="col-lg-6 order-1 order-lg-2" data-aos="zoom-in"
data-aos-delay="100">
         <div class="about-img">
           <img src="static/img/about.jpg" alt="">
         </div>
       </div>
       <div class="col-lg-6 pt-4 pt-lg-0 order-2 order-lg-1 content">
         <h3>Radisson Hotel Analysis</h3>
         <p class="fst-italic">
           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 are 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.

         <p>
```

```
        </p>
      </div>
    </div>

  </div>
</section><!-- End About Section -->



<!-- ======= Events Section ======= -->
<section id="events" class="events">
  <div class="container" data-aos="fade-up">

    <div class="section-title">
      <h2>Events</h2>
      <p>Organize Your Events in our Radisson Hotel</p>
    </div>

    <div class="events-slider swiper" data-aos="fade-up" data-aos-
delay="100">
      <div class="swiper-wrapper">

        <div class="swiper-slide">
          <div class="row event-item">
            <div class="col-lg-6">
              <img src="static/img/event-birthday.jpg" class="img-fluid"
alt="">
            </div>
            <div class="col-lg-6 pt-4 pt-lg-0 content">
              <h3>Birthday Parties</h3>
              <div class="price">
                <p><span>$189</span></p>
              </div>
              <p class="fst-italic">

              </p>


            </div>
```

```
        </div>
      </div><!-- End testimonial item -->

      <div class="swiper-slide">
        <div class="row event-item">
          <div class="col-lg-6">
            <img src="static/img/event-private.jpg" class="img-fluid"
alt="">
          </div>
          <div class="col-lg-6 pt-4 pt-lg-0 content">
            <h3>Private Parties</h3>
            <div class="price">
              <p><span>$290</span></p>
            </div>
            <p class="fst-italic">

            </p>


          </div>
        </div>
      </div><!-- End testimonial item -->

      <div class="swiper-slide">
        <div class="row event-item">
          <div class="col-lg-6">
            <img src="static/img/event-custom.jpg" class="img-fluid"
alt="">
          </div>
          <div class="col-lg-6 pt-4 pt-lg-0 content">
            <h3>Custom Parties</h3>
            <div class="price">
              <p><span>$99</span></p>
            </div>



          </div>
        </div>
      </div><!-- End testimonial item -->
```

```
      </div>
      <div class="swiper-pagination"></div>
    </div>

  </div>
</section><!-- End Events Section -->


<!-- ======= Gallery Section ======= -->
<section id="gallery" class="gallery">

  <div class="container" data-aos="fade-up">
    <div class="section-title">
      <h2>Gallery</h2>
      <p>Some photos from Our Restaurant</p>
    </div>
  </div>

  <div class="container-fluid" data-aos="fade-up" data-aos-
delay="100">

    <div class="row g-0">

      <div class="col-lg-3 col-md-4">
        <div class="gallery-item">
          <a href="static/img/gallery/gallery-1.jpg" class="gallery-
lightbox" data-gall="gallery-item">
            <img src="static/img/gallery/gallery-1.jpg" alt=""
class="img-fluid">
          </a>
        </div>
      </div>

      <div class="col-lg-3 col-md-4">
        <div class="gallery-item">
          <a href="static/img/gallery/gallery-2.jpg" class="gallery-
lightbox" data-gall="gallery-item">
            <img src="static/img/gallery/gallery-2.jpg" alt=""
class="img-fluid">
```

```
        </a>
      </div>
    </div>

    <div class="col-lg-3 col-md-4">
      <div class="gallery-item">
        <a href="static/img/gallery/gallery-3.jpg" class="gallery-
lightbox" data-gall="gallery-item">
          <img src="static/img/gallery/gallery-3.jpg" alt=""
class="img-fluid">
        </a>
      </div>
    </div>

    <div class="col-lg-3 col-md-4">
      <div class="gallery-item">
        <a href="static/img/gallery/gallery-4.jpg" class="gallery-
lightbox" data-gall="gallery-item">
          <img src="static/img/gallery/gallery-4.jpg" alt=""
class="img-fluid">
        </a>
      </div>
    </div>

    <div class="col-lg-3 col-md-4">
      <div class="gallery-item">
        <a href="static/img/gallery/gallery-5.jpg" class="gallery-
lightbox" data-gall="gallery-item">
          <img src="static/img/gallery/gallery-5.jpg" alt=""
class="img-fluid">
        </a>
      </div>
    </div>

    <div class="col-lg-3 col-md-4">
      <div class="gallery-item">
        <a href="static/img/gallery/gallery-6.jpg" class="gallery-
lightbox" data-gall="gallery-item">
          <img src="static/img/gallery/gallery-6.jpg" alt=""
class="img-fluid">
        </a>
```

```
      </div>
    </div>

    <div class="col-lg-3 col-md-4">
      <div class="gallery-item">
        <a href="static/img/gallery/gallery-7.jpg" class="gallery-
lightbox" data-gall="gallery-item">
          <img src="static/img/gallery/gallery-7.jpg" alt=""
class="img-fluid">
        </a>
      </div>
    </div>

    <div class="col-lg-3 col-md-4">
      <div class="gallery-item">
        <a href="static/img/gallery/gallery-8.jpg" class="gallery-
lightbox" data-gall="gallery-item">
          <img src="static/img/gallery/gallery-8.jpg" alt=""
class="img-fluid">
        </a>
      </div>
    </div>

   </div>

  </div>
</section><!-- End Gallery Section -->

<!-- ======= Chefs Section ======= -->
<section id="chefs" class="chefs">
  <div class="container" data-aos="fade-up">

    <div class="section-title">

      <center><p>Analysis Dashboard</p></center>
      <div class='tableauPlaceholder' id='viz1682168158858'
style='position: relative'><noscript><a href='#'><img alt='
RADISSON HOSPITALITY ANALYSIS '
src='https:&#47;&#47;public.tableau.com&#47;static&#47;images
&#47;Ra&#47;RadissionhospitalityAnalysisDashboard&#47;Radis
sionhospitalityanalysisDashboard&#47;1_rss.png' style='border:
```

none' /></noscript><object class='tableauViz'
style='display:none;'><param name='host_url'
value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param
name='embed_code_version' value='3' /> <param name='site_root'
value='' /><param name='name'
value='RadissionhospitalityAnalysisDashboard/Radissionhosp
italityanalysisDashboard' /><param name='tabs' value='no'
/><param name='toolbar' value='yes' /><param name='static_image'
value='https://public.tableau.com/static/imag
es/Ra/RadissionhospitalityAnalysisDashboard/Rad
issionhospitalityanalysisDashboard/1.png' /> <param
name='animate_transition' value='yes' /><param
name='display_static_image' value='yes' /><param
name='display_spinner' value='yes' /><param
name='display_overlay' value='yes' /><param name='display_count'
value='yes' /><param name='language' value='en-US'
/></object> <script type='text/javascript'>
var divElement = document.getElementById('viz1682168158858');
var vizElement = divElement.getElementsByTagName('object')[0];
if (divElement.offsetWidth > 800) {
vizElement.style.width='1320px';vizElement.style.height='4096px';
} else if (divElement.offsetWidth > 500) {
vizElement.style.width='1320px';vizElement.style.height='4096px';
} else {
vizElement.style.width='100%';vizElement.style.height='3677px';}
var scriptElement = document.createElement('script');
scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement);
</script>

Analysis Story

<div class='tableauPlaceholder' id='viz1682168704636'
style='position: relative'><noscript><a href='#'><img alt='Radisson
Analysis Story '
src='https://public.tableau.com/static/images
/Ra/RadissonhotelAnalysisstory/RadissonAnalysis

```
story&#47;1_rss.png' style='border: none' /></a></noscript><object
class='tableauViz'  style='display:none;'><param name='host_url'
value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param
name='embed_code_version' value='3' /> <param name='site_root'
value='' /><param name='name'
value='RadissonhotelAnalysisstory&#47;RadissonAnalysisstory'
/><param name='tabs' value='no' /><param name='toolbar'
value='yes' /><param name='static_image'
value='https:&#47;&#47;public.tableau.com&#47;static&#47;imag
es&#47;Ra&#47;RadissonhotelAnalysisstory&#47;RadissonAnalys
isstory&#47;1.png' /> <param name='animate_transition'
value='yes' /><param name='display_static_image' value='yes'
/><param name='display_spinner' value='yes' /><param
name='display_overlay' value='yes' /><param name='display_count'
value='yes' /><param name='language' value='en-US'
/></object></div>                <script type='text/javascript'>
var divElement = document.getElementById('viz1682168704636');
var vizElement = divElement.getElementsByTagName('object')[0];
vizElement.style.width='1016px';vizElement.style.height='991px';
var scriptElement = document.createElement('script');
scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement);
</script>

 </div>
</section><!-- End Chefs Section -->

<!-- ======= Contact Section ======= -->
<section id="contact" class="contact">
 <div class="container" data-aos="fade-up">

  <div class="section-title">
   <h2>Contact</h2>
   <p>Contact Us</p>
  </div>
 </div>


 <div class="container" data-aos="fade-up">
```

```
   <div class="row mt-5">

     <div class="col-lg-4">
       <div class="info">
         <div class="address">
           <i class="bi bi-geo-alt"></i>
           <h4>Location:</h4>
           <p>Radisson Hotel Bhopal,Gulmohar Colony, Bhopal,
Madhya Pradesh 462039</p>
         </div>

         <div class="open-hours">
           <i class="bi bi-clock"></i>
           <h4>Open Hours:</h4>
           <p>
             Monday-Saturday:<br>
             10:00 AM - 11:00 PM
           </p>
         </div>

         <div class="email">
           <i class="bi bi-envelope"></i>
           <h4>Email:</h4>
           <p>info@radisson.com</p>
         </div>

         <div class="phone">
           <i class="bi bi-phone"></i>
           <h4>Call:</h4>
           <p>+91 9589 55488 55</p>
         </div>

       </div>

     </div>

     <div class="col-lg-8 mt-5 mt-lg-0">

       <div class="mapouter"><div class="gmap_canvas"><iframe
class="gmap_iframe" frameborder="0" scrolling="no"
```

```
  marginheight="0" marginwidth="0"
  src="https://maps.google.com/maps?width=600&amp;height=400&
  amp;hl=en&amp;q=radisson
  bhopal&amp;t=&amp;z=14&amp;ie=UTF8&amp;iwloc=B&amp;o
  utput=embed"></iframe><a href="https://mcpedls.com/">minecraft
  download</a></div><style>.mapouter{position:relative;text-
  align:right;width:600px;height:400px;}.gmap_canvas
  {overflow:hidden;background:none!important;width:600px;height:
  400px;}.gmap_iframe
  {width:600px!important;height:400px!important;}</style></div>
      </div>

    </div>

   </div>
  </section><!-- End Contact Section -->

</main><!-- End #main -->

<!-- ======= Footer ======= -->
<footer id="footer">
  <div class="footer-top">
    <div class="container">
      <div class="row">

        <div class="col-lg-3 col-md-6">
          <div class="footer-info">
            <h3>Radisson Hotel</h3>
            <p>
              Radisson Hotel Bhopal,Gulmohar Colony <br>
              Bhopal, Madhya Pradesh 462039<br><br>
              <strong>Phone:</strong> +91 9589 55488 55<br>
              <strong>Email:</strong> info@radisson.com<br>
            </p>
            <div class="social-links mt-3">
              <a href="#" class="twitter"><i class="bx bxl-
  twitter"></i></a>
              <a href="#" class="facebook"><i class="bx bxl-
  facebook"></i></a>
              <a href="#" class="instagram"><i class="bx bxl-
  instagram"></i></a>
```

```
          <a href="#" class="google-plus"><i class="bx bxl-
skype"></i></a>
          <a href="#" class="linkedin"><i class="bx bxl-
linkedin"></i></a>
        </div>
      </div>
    </div>

    <div class="col-lg-2 col-md-6 footer-links">
      <h4>Useful Links</h4>
      <ul>
        <li><i class="bx bx-chevron-right"></i> <a
href="#">Home</a></li>
        <li><i class="bx bx-chevron-right"></i> <a href="#">About
us</a></li>
        <li><i class="bx bx-chevron-right"></i> <a
href="#">Services</a></li>
      </ul>
    </div>




    </div>

  </div>
 </div>
</div>

<div class="container">
 <div class="copyright">
  &copy; Copyright <strong><span>Radisson
Hotel</span></strong>. All Rights Reserved
 </div>
 <div class="credits">
  <!-- All the links in the footer should remain intact. -->
  <!-- You can delete the links only if you purchased the pro
version. -->
  <!-- Licensing information: https://bootstrapmade.com/license/ --
>
  <!-- Purchase the pro version with working PHP/AJAX contact
```

```
    form: https://bootstrapmade.com/restaurantly-restaurant-template/ --
    >
      Designed by <a
    href="https://bootstrapmade.com/">SmartBridge</a>
     </div>
    </div>
  </footer><!-- End Footer -->

  <div id="preloader"></div>
  <a href="#" class="back-to-top d-flex align-items-center justify-
    content-center"><i class="bi bi-arrow-up-short"></i></a>


  <!-- Vendor JS Files -->
  <script src="{{ url_for('static', filename='vendor/aos/aos.js')
    }}"></script>
  <script src="{{ url_for('static',
    filename='vendor/bootstrap/js/bootstrap.bundle.min.js')
    }}"></script>
  <script src="{{ url_for('static',
    filename='vendor/glightbox/js/glightbox.min.js') }}"></script>
  <script src="{{ url_for('static', filename='vendor/isotope-
    layout/isotope.pkgd.min.js') }}"></script>
  <script src="{{ url_for('static', filename='vendor/swiper/swiper-
    bundle.min.js') }}"></script>
  <script src="{{ url_for('static', filename='vendor/php-email-
    form/validate.js') }}"></script>




  <!-- Template Main JS File -->
  <script src="{{ url_for('static', filename='js/main.js') }}"></script>


</body>

</html>
```

CHAPTER 8

CONCLUSION

In conclusion, data visualization is a valuable approach for analyzing the performance and efficiency of Radisson Hotels, but it should be used with caution. The advantages, such as improved communication and insight discovery, are substantial, but they come with potential drawbacks related to data quality, misinterpretation, and cost. To maximize the benefits and minimize the disadvantages, it's essential to approach data visualization with a clear understanding of its limitations and a commitment to using it responsibly and ethically.Analyzing the performance and efficiency of Radisson Hotels using data visualization is a powerful approach that provides valuable insights for informed decision-making and continuous improvement. Demonstrating sustainability efforts through data visualization showcases the company's commitment to environmental responsibility, appealing to eco-conscious guests and investors. This analysis encourages a culture of data-driven decision making within Radisson Hotels, emphasizing the value of data in shaping the company's future.In conclusion, data visualization is a valuable tool for assessing the performance and efficiency of Radisson Hotels, enabling data driven decisions, enhancing customer experiences, and positioning the company for sustainable growth and success in the competitive hospitality industry.

CHAPTER 9

FUTURE SCOPE

The future of data visualization in the hospitality industry, including Radisson Hotels, is closely linked to technological advancements, evolving customer expectations, and the industry's commitment to sustainability and data ethics. As these trends develop, data visualization will remain a vital tool for analyzing performance and efficiency, providing actionable insights for the industry's continued growth and success.

Advanced Machine Learning and AI: The integration of machine learning and artificial intelligence will enable more sophisticated predictive analytics. Hotels like Radisson can use AI algorithms to forecast occupancy rates, pricing strategies, and customer preferences with greater accuracy.

Real-time Data and IoT: The use of Internet of Things (IoT) devices will

provide real-time data on hotel operations, enabling instant adjustments to enhance efficiency and customer satisfaction. Data visualization tools will need to adapt to handle this influx of real-time information.

Cross-Industry Collaboration: Collaboration between hotels and other stakeholders, such as airlines, tourism agencies, and tech companies, will create opportunities for more comprehensive data analysis and cross-industry insights.

Sustainability Metrics: The integration of sustainability metrics into data visualization will continue to grow as the focus on environmental and social responsibility expands. This includes tracking energy consumption, waste management, and sustainable sourcing

Voice and Natural Language Processing (NLP): Voice-activated data visualization tools using NLP can simplify the interaction with data, making it easier for hotel staff to access insights and act upon them.
Augmented Reality (AR) and Virtual Reality (VR): AR and VR can enhance the way data is visualized, allowing hotel managers to explore data in immersive environments and gain deeper insights.

Customer Sentiment Analysis: Advancements in sentiment analysis will allow hotels to gain deeper insights into customer feedback and preferences, enabling more targeted service improvements.

DONE BY:

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