

Project Demonstration & Report

PROJECT TITLE:

Competitive Analysis of Leading Travel
Aggregators

TEAM

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Team Size : 5

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1.INTRODUCTION

1.1 Overview

A travel aggregator is a website or platform that allows users to search and compare prices for travel-related products and services, such as flights, hotels, vacation rentals, and car rentals, from multiple providers. Travel aggregators typically provide a simple and convenient way for users to find and book travel products and services, and often offer additional features such as reviews, ratings, and photos to help users make informed decisions. Some popular examples of travel aggregator websites include Expedia, Booking.com, Kayak, and Trivago.

Data Collection and Pre-Processing

A comprehensive dataset was collected from Kaggle Which includes INR amount, No of Passengers, Booking time, From city, To country, etc... The collected data underwent thorough preprocessing to handle missing values, remove inconsistencies, and ensure data quality.

Exploratory Data Analysis

EDA was conducted to gain a deep understanding of the dataset. Visualizations and summary statistics helped in understanding the characteristics of the data and guided further analysis.

Creating a Flask Web Application

For Competitive Analysis of Leading Travel Aggregators involves building an interface where we can input relevant information, and the application will use the predictive model to analyse the leading travel aggregators.

1.2 Purpose

Competitive analysis of leading travel aggregators serves as a crucial strategic tool for businesses in the travel industry. By evaluating the competitive landscape, companies can gain valuable insights into market trends and dynamics. Understanding the strategies and offerings of top players helps businesses stay ahead of the curve and adapt their models to suit changing customer demands.

Benchmarking performance against leading travel aggregators allows businesses to gauge their strengths and weaknesses. This comparison helps set realistic goals and create actionable plans for improvement, ensuring a competitive edge in the market.

Through competitive analysis, businesses can identify gaps and opportunities that existing players may have overlooked. These insights enable them to create unique value propositions that cater to unmet customer needs, attracting a larger customer base.

By studying customer behaviour and preferences, companies can refine their products and services to align with customer expectations. This customer-centric approach enhances user experience and fosters customer loyalty.

Analysing pricing and positioning strategies of leading aggregators enables businesses to set competitive prices for their offerings. Understanding the perceived value of different features helps optimize pricing models for maximum profitability.

Key Outcomes

- Identifying Market Opportunities
- Benchmarking
- Product and Service Enhancements
- Pricing Strategy
- Marketing Insights

2. LITERATURE SURVEY

A literature survey on the competitive analysis of leading travel aggregators entails examining various research sources and studies related to this specific domain. The survey would typically start with a market overview and trends section, exploring published research on the current state of the travel aggregator industry, including market size, major players, and growth trends. This segment sets the context for the subsequent analysis and identifies the key areas of interest.

2.1 Existing Problem

Solving the Competitive Analysis of Leading Travel Aggregators involves a systematic approach that combines the data analysis, model development and evaluation.

2.2 Proposed Solution

To address the existing problems related to competitive analysis of leading travel aggregators, several proposed solutions can be implemented. Firstly, leveraging advanced data aggregation and monitoring tools can help gather accurate and real-time information on competitors. This ensures that businesses have up-to-date insights to inform their strategies and decision-making.

Forming specialized competitive intelligence teams can significantly improve the quality and depth of the analysis. These teams can focus on gathering and synthesizing data from various sources, including industry reports, market research, and social media.

Ethical data gathering practices are vital to maintain the trust of consumers and competitors. Ensuring that data collection adheres to ethical and legal standards is crucial to avoid privacy concerns and potential legal issues.

Finally, embracing agility and flexibility is key in the rapidly changing travel aggregator landscape. Companies must be prepared to adapt swiftly to unexpected external factors, seize opportunities, and address challenges proactively.

3.THEORETICAL ANALYSIS

Creating a detailed block diagram of Competitive Analysis of Leading Travel Aggregators involves breaking down the process into key steps and components.

Below is a high-level block diagram outlining the main stages and elements involved in analysing the leading Travel Aggregators. The block diagram illustrates the end-to-end process of Competitive Analysis of Leading Travel Aggregators.

3.1 Block Diagram

Data Collection

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes and generate insights from the data.

Data Preparation

Preparing the data for visualization involves cleaning the data to remove irrelevant or missing data, transforming the data into a format that can be easily visualized, exploring the data to identify patterns and trends, filtering the data to focus on specific subsets of data, preparing the data for visualization software, and ensuring the data is accurate and complete. This process helps to make the data easily understandable and ready for creating visualizations to gain insights into the performance and efficiency.

Data Visualization

Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs, and maps, data visualizations can help people quickly identify patterns, trends, and outliers in the data.

Dashboard

A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data and are typically designed for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs, and tables.

Story

A data story is a way of presenting data and analysis in a narrative format, with the goal of making the information more engaging and easier to understand. A data story typically includes a clear introduction that sets the stage and explains the context for the data, a body that presents the data and analysis in a logical and systematic way, and a conclusion that summarizes the key findings and highlights their implications. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos.

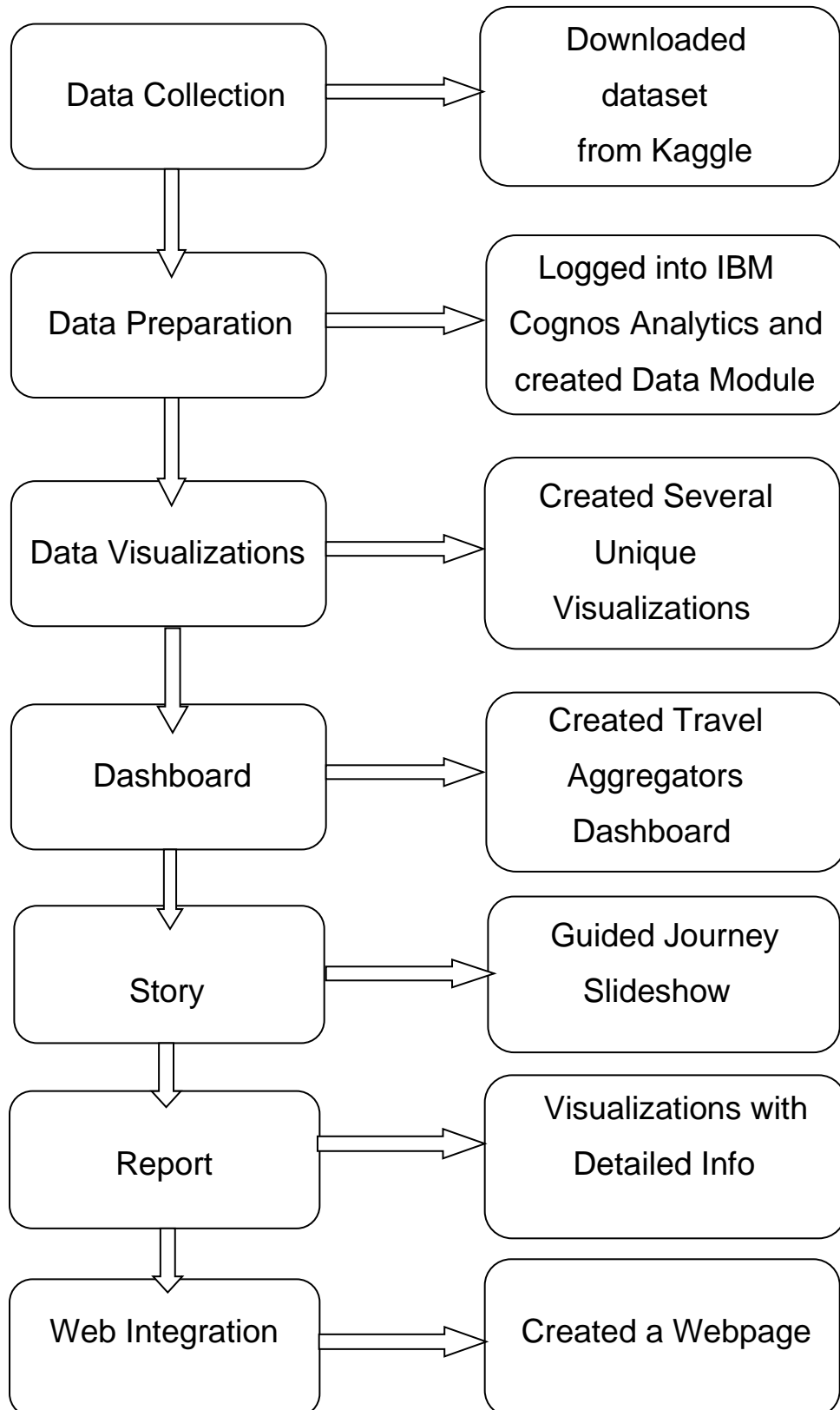
Report

A report is a document that presents information in a specific format and layout, usually based on data from a database or other data source. A report in IBM Cognos can contain various elements, such as tables, charts, graphs, and images, as well as text and data elements, and it is designed to be used by business users to help them better understand their data and make informed decisions.

Web Integration

Publishing helps us to track and monitor key performance metrics, to communicate results and progress. help a publisher stay informed, make better decisions, and communicate their performance to others.

Competitive Analysis of Leading Travel Aggregators



3.2 Software and Hardware Designing

Software Requirements

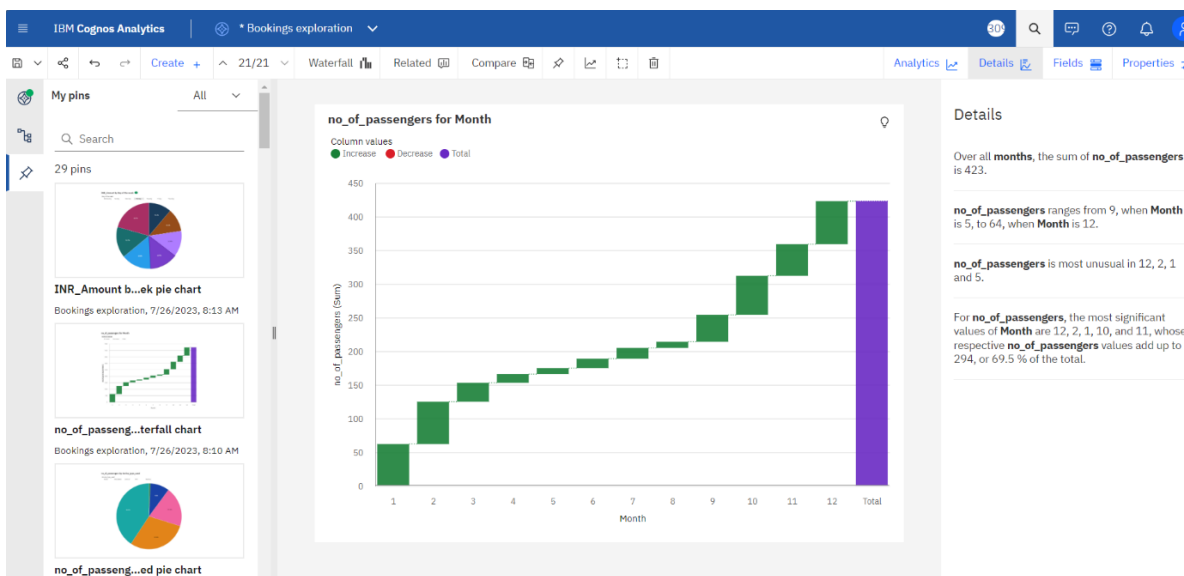
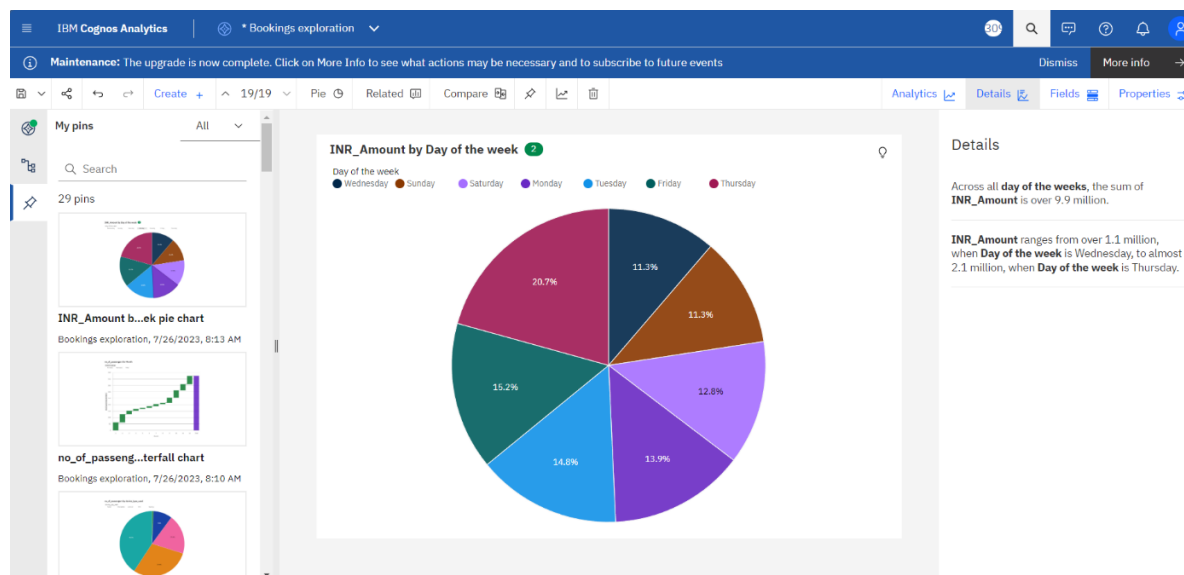
- IBM Cognos Analytics Tool
- Flask
- Integrated Development Environment (IDE)- Spyder

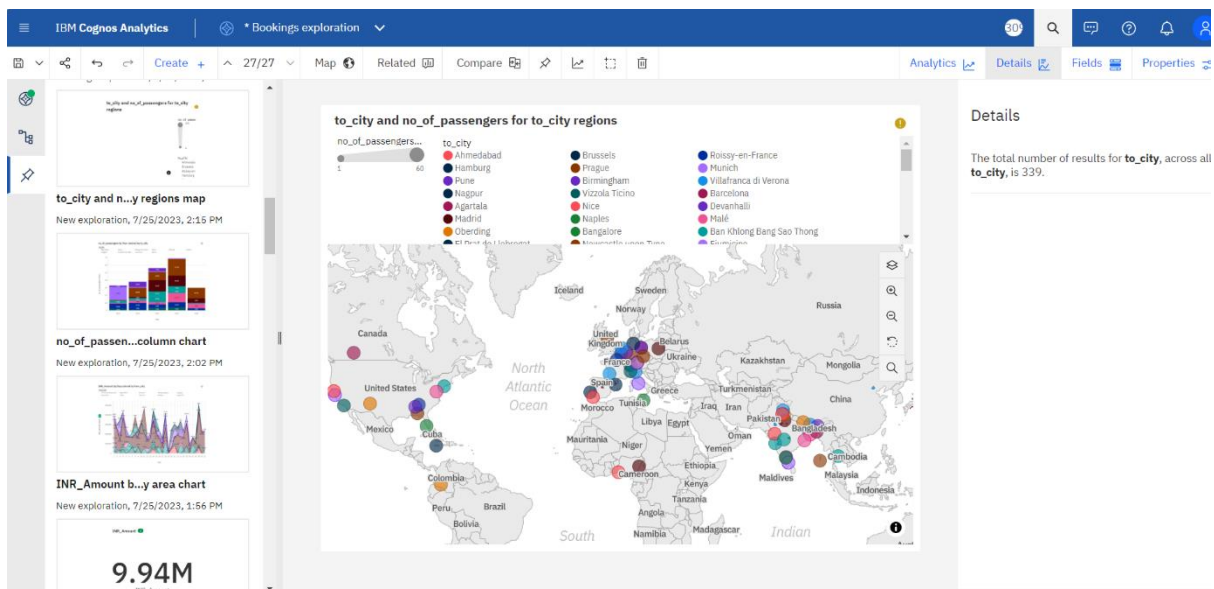
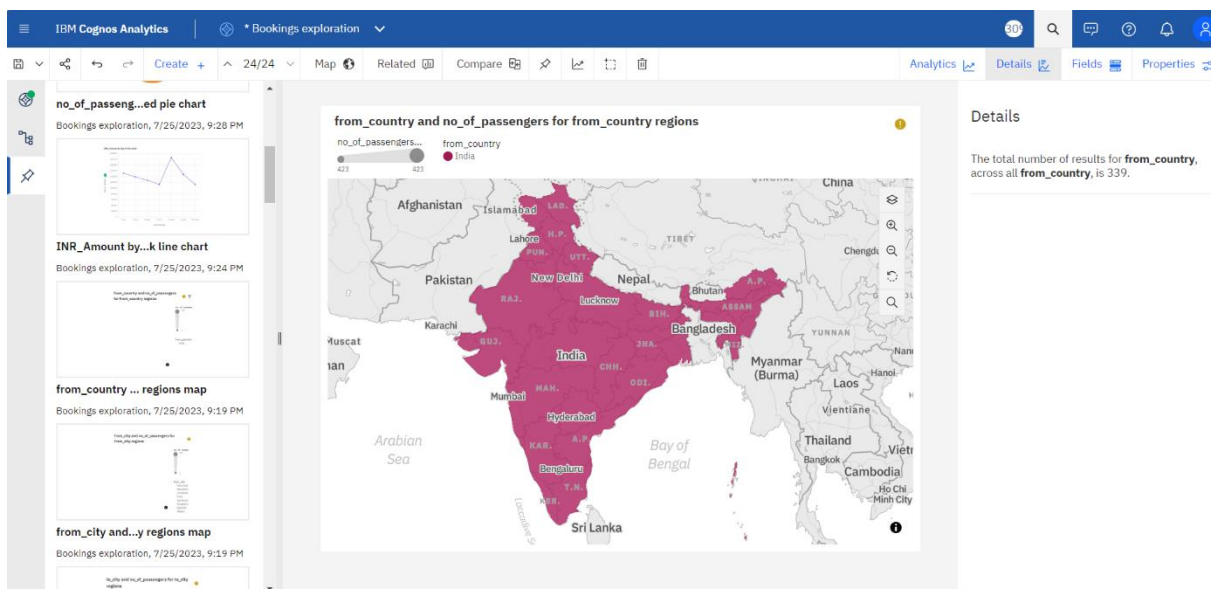
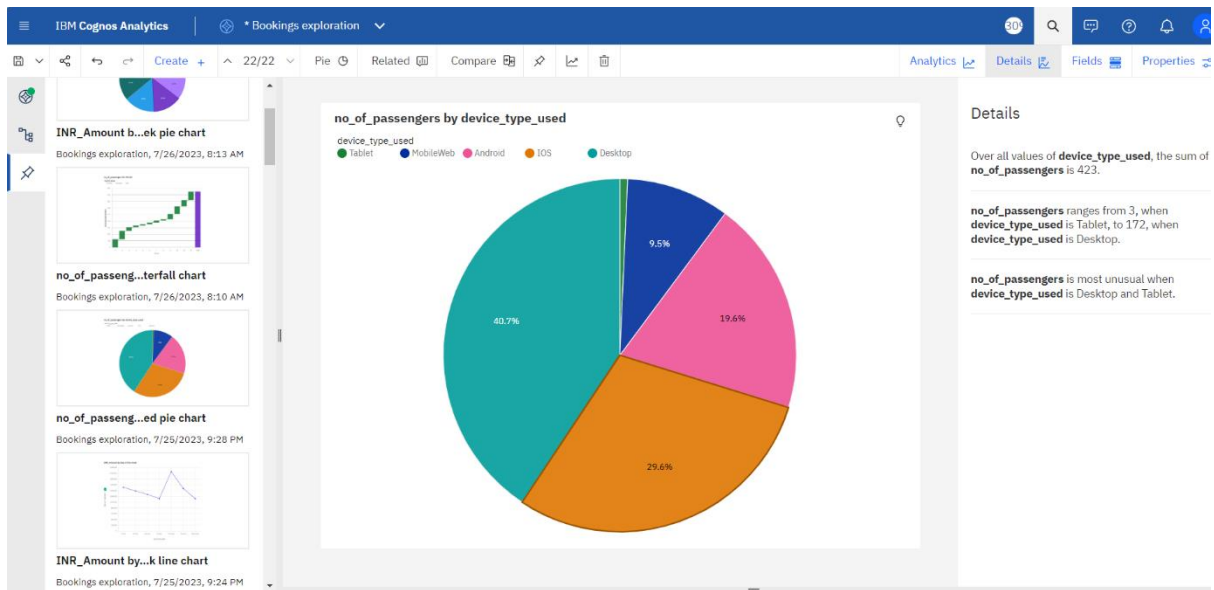
Hardware Requirements

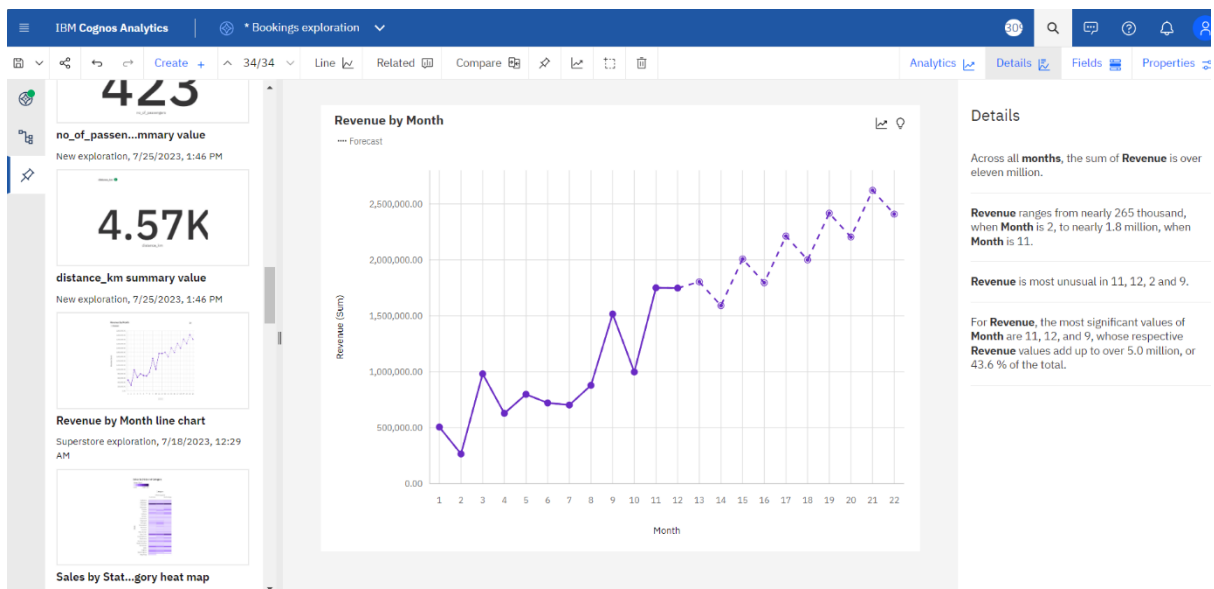
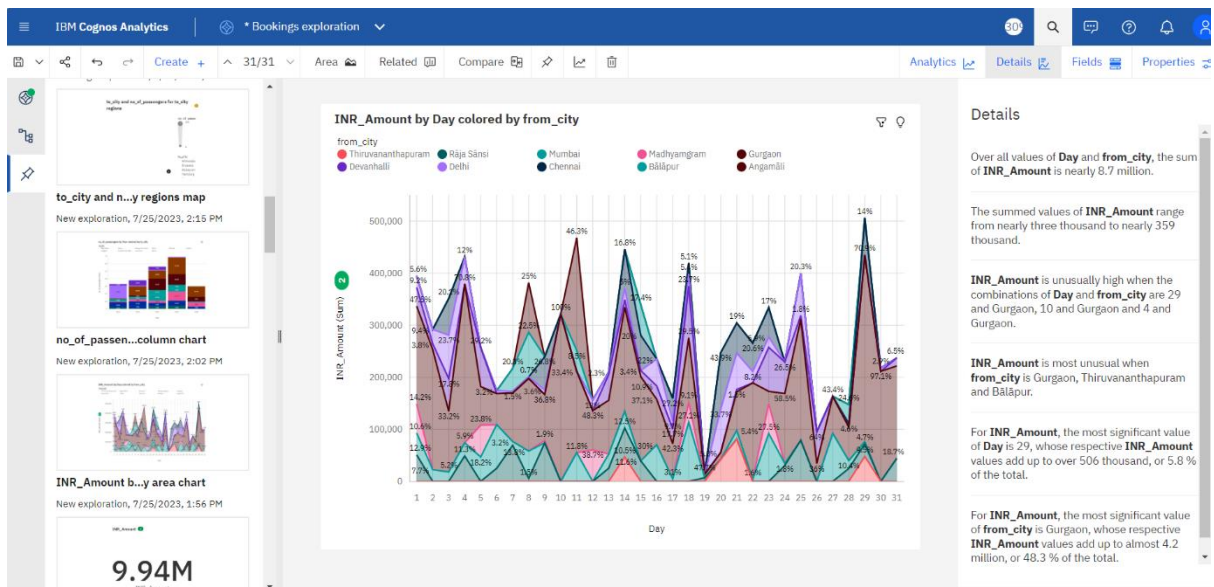
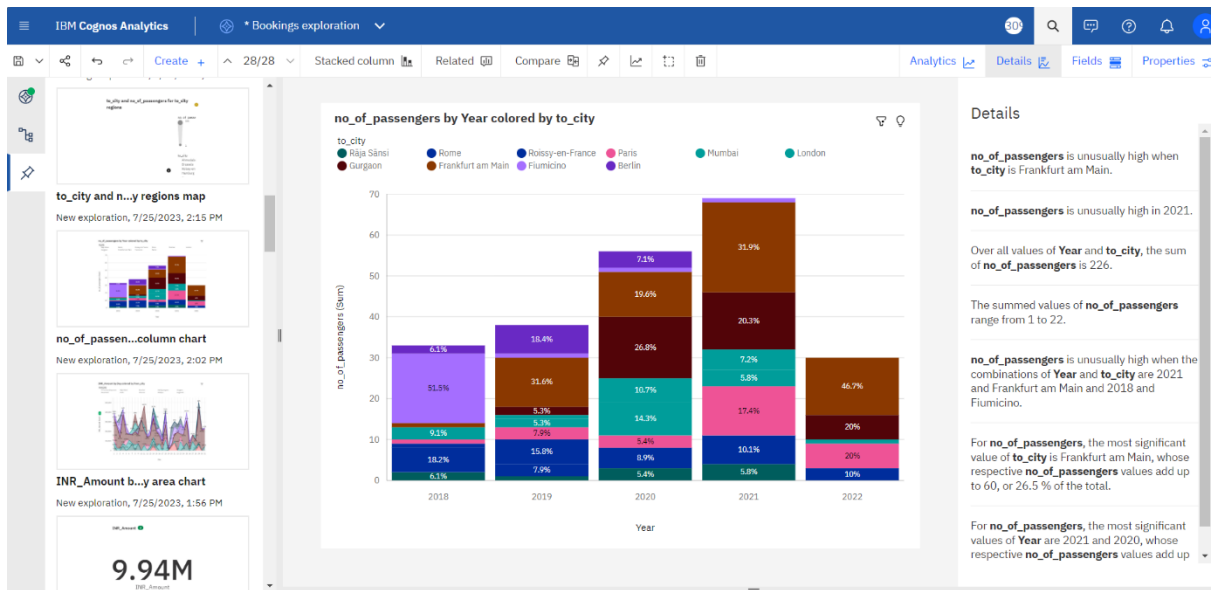
Minimum System Requirements (RAM 4GB, Quad Core Processor or above)

4.RESULT

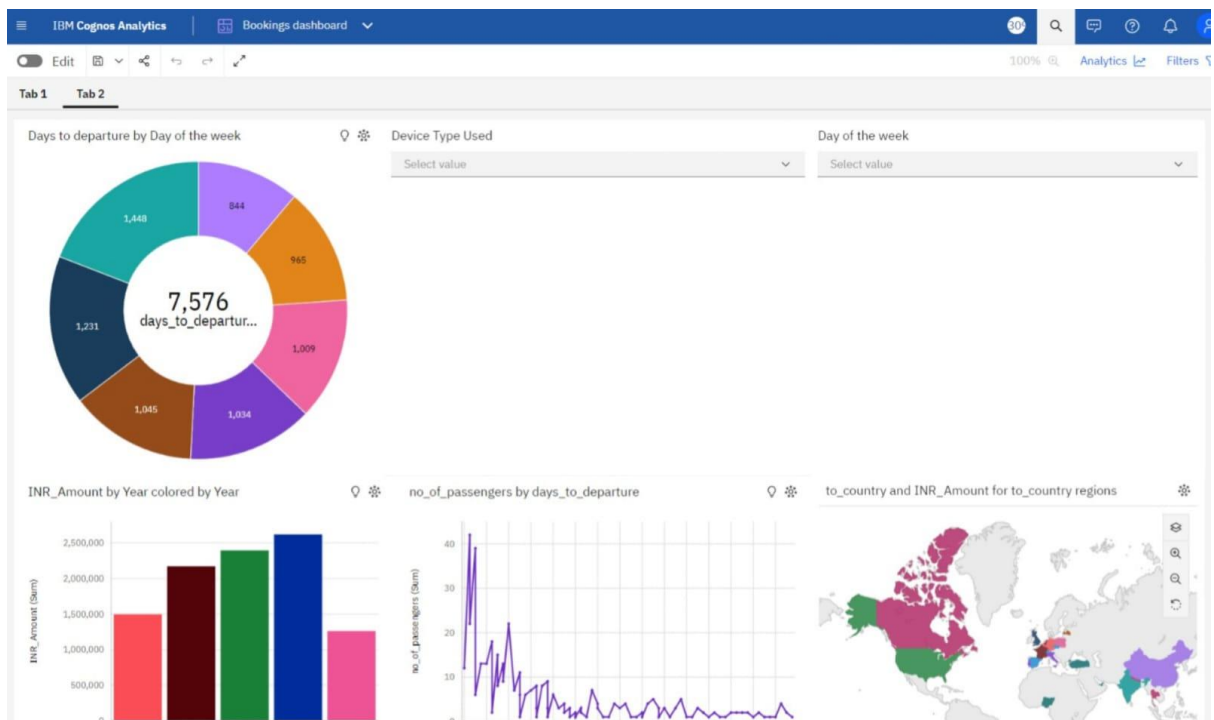
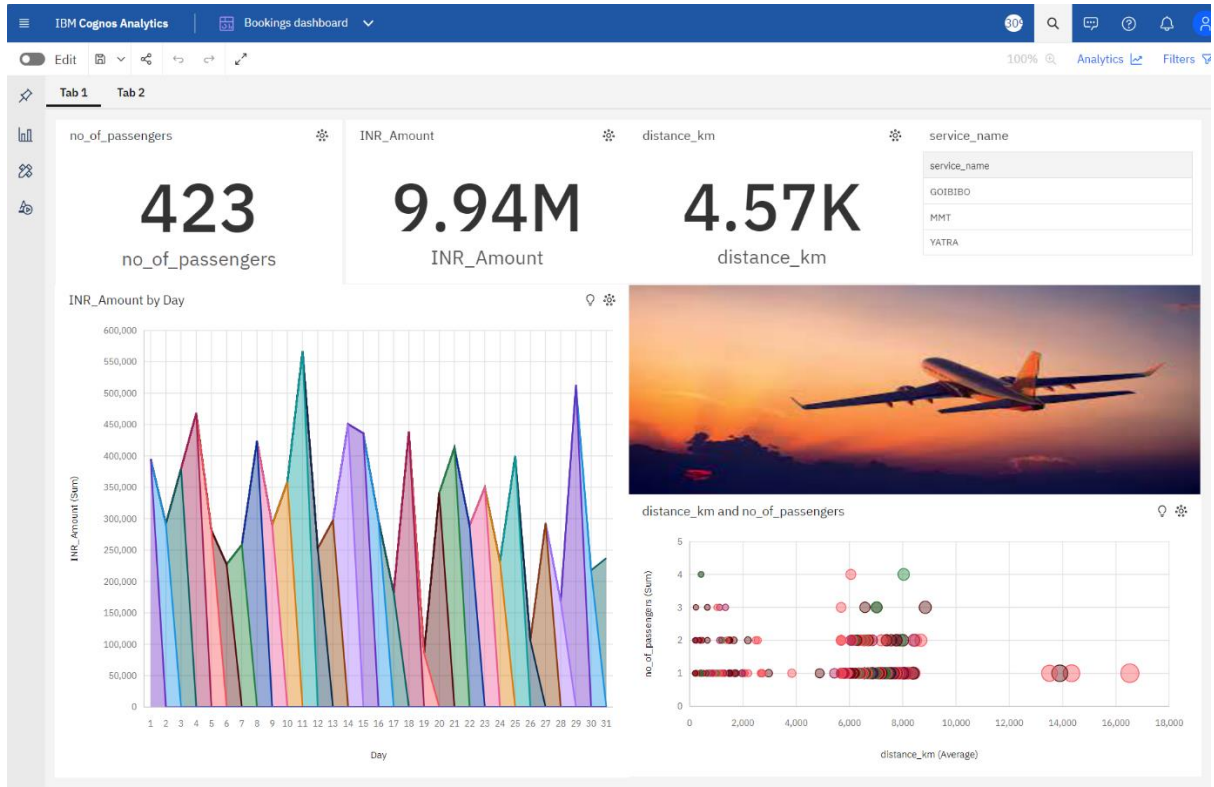
Data Visualizations



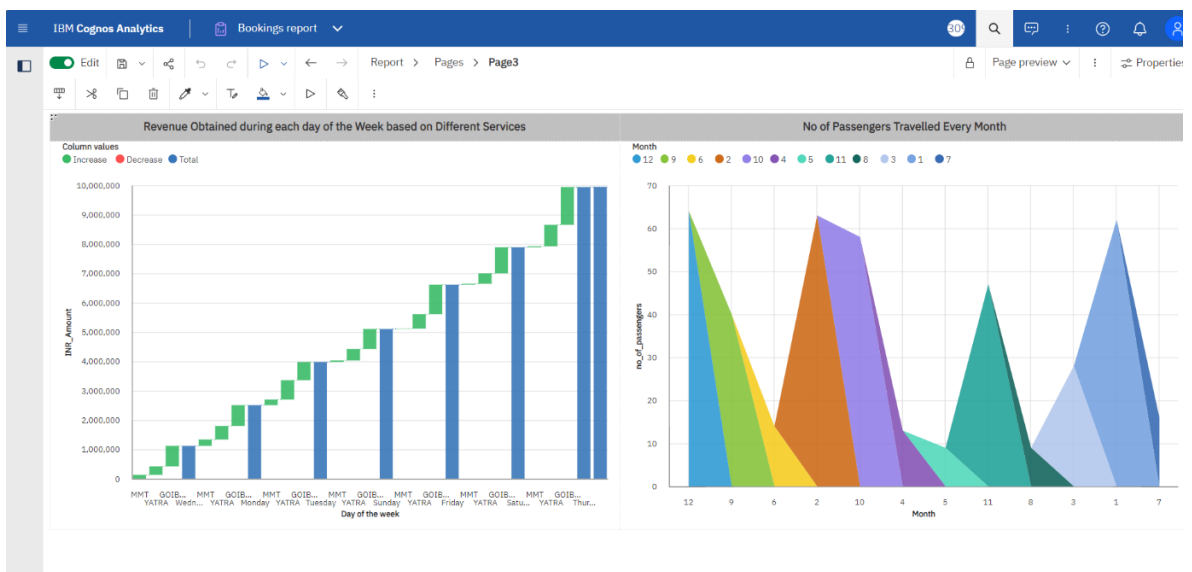
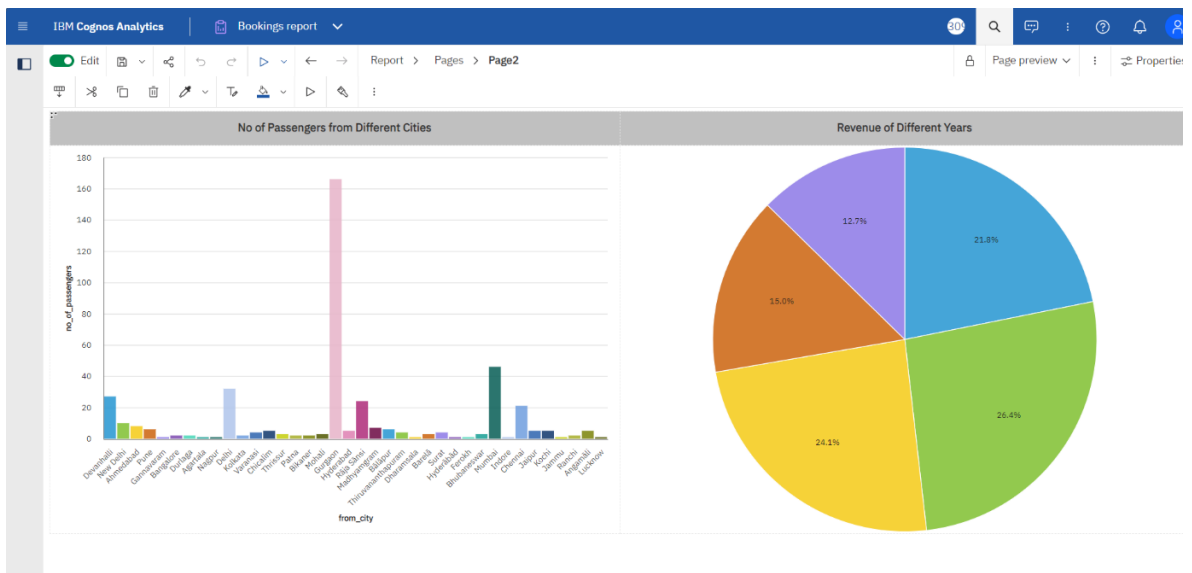
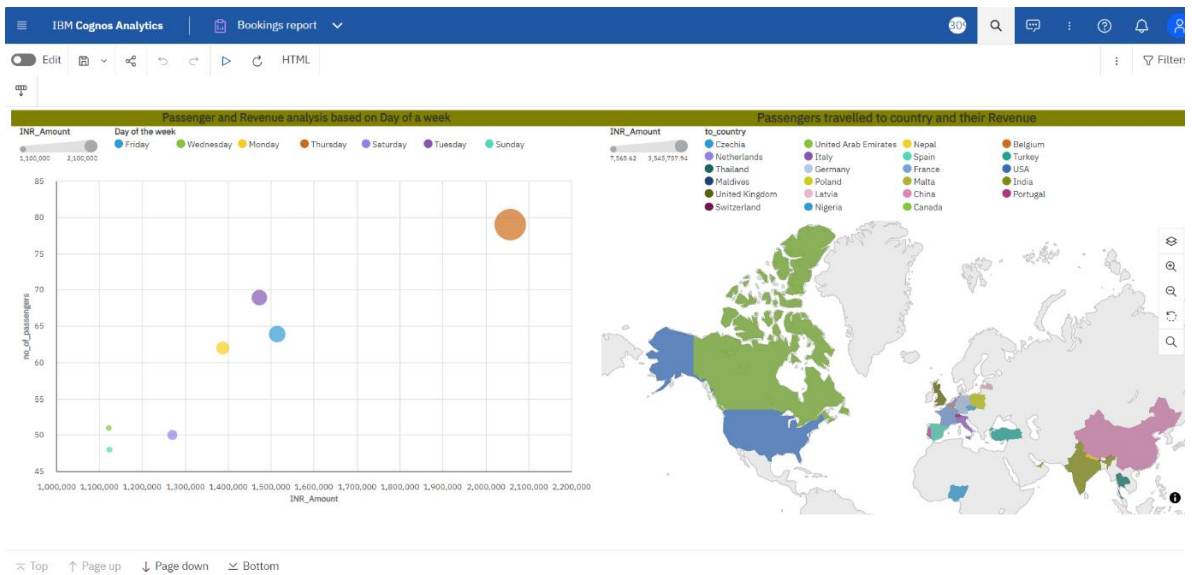




Dashboard



Report



Story

IBM Cognos Analytics

* Bookings story

30

Q

Edit

Analytics

Filters

Travel Aggregators

Analysis Story Board

- No of Passengers when Month is 12.
- No of Passengers in 12, 2, 1 and
- Based on the no_of_passen

Prev scene

Next scene

Scene 1 of 5

0:00.0

0:05.0

IBM Cognos Analytics

* Bookings story

30

Q

Edit

Analytics

Filters

No of Passengers by Year

- Based on the current forecasting, no_of_passengers may reach 85.59 by Year 2023.
- From 2018 to 2019, Fiumicino's no_of_passengers dropped by 94%.
- No of Passengers is unusually high when city is Frankfurt am Main.

No_of_Passengers by Year

Year	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5
2018	18.2%	9.1%	31.9%	18.4%	2.4%
2019	7.0%	15.8%	7.0%	31.6%	18.4%
2020	5.4%	5.4%	14.3%	18.7%	26.8%
2021	5.8%	10.1%	17.4%	7.2%	31.9%
2022	10%	20%	20%	46.7%	

Prev scene

Next scene

Scene 2 of 5

0:00.0

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IBM Cognos Analytics

* Bookings story

30

Q

Edit

Analytics

Filters

No of Passengers for Month

- No of Passengers ranges from 9, when Month is 5, to 64, when Month is 12.
- No of Passengers is most unusual in 12, 2, 1 and 5.
- Based on the current forecasting, no_of_passengers may reach -36.62 by Month 15.

No_of_Passengers for Month

Month	no_of_passengers (Sum)
1	~50
2	~100
3	~120
4	~140
5	~160
6	~180
7	~200
8	~220
9	~240
10	~260
11	~280
12	~300
Total	~320

Prev scene

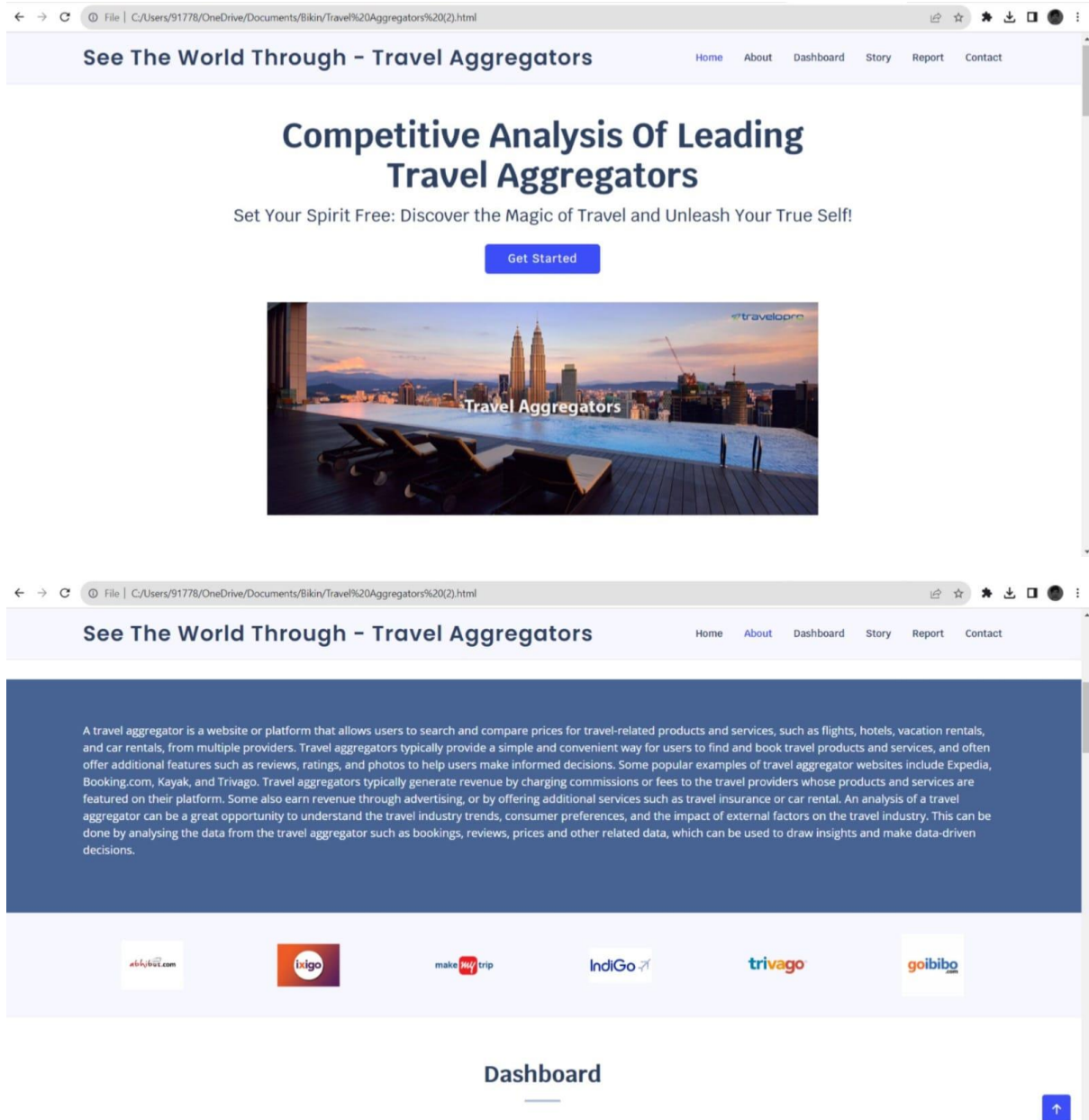
Next scene

Scene 3 of 5

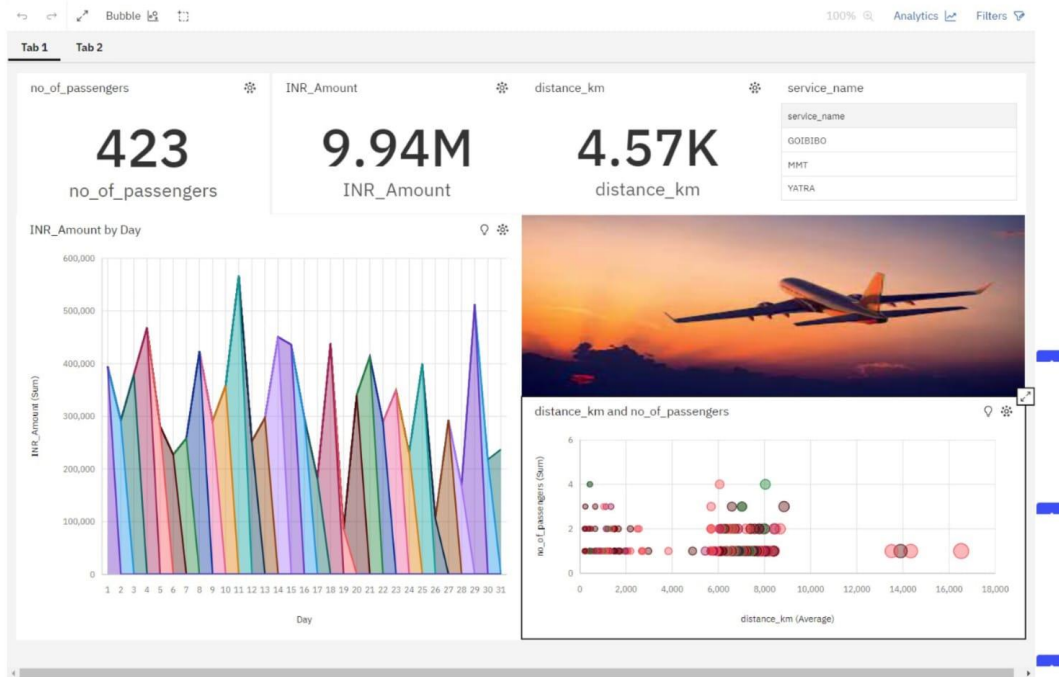
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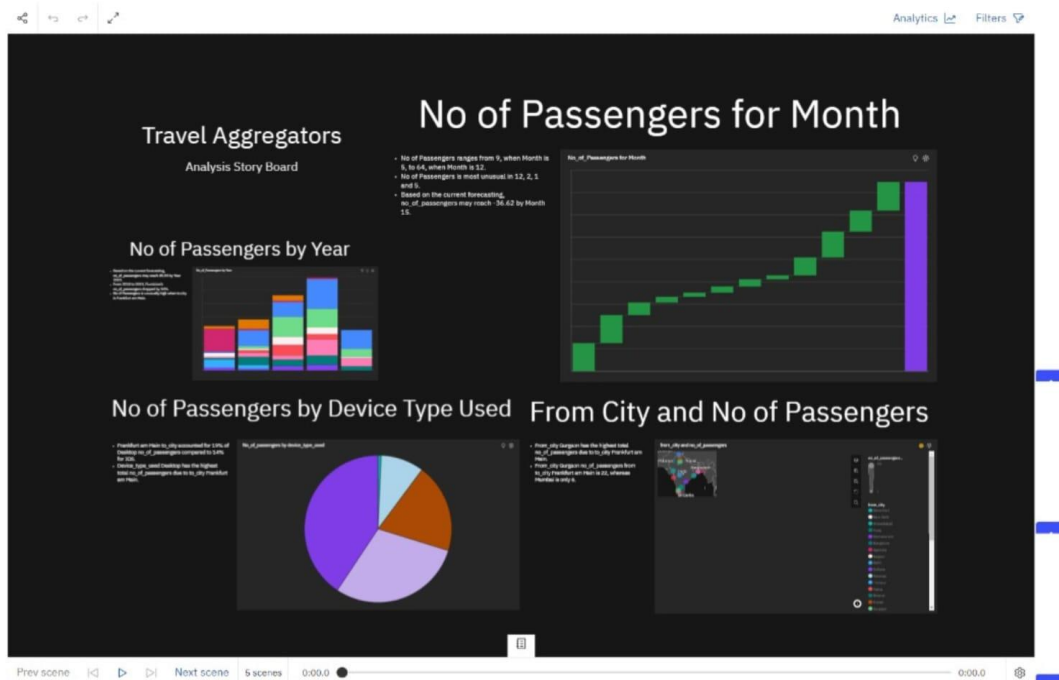
Web Integration



Dashboard



Story



5.ADVANTAGES & DISADVANTAGES

ADVANTAGES

Identify Market Opportunities

By analyzing competitors, travel aggregators can identify untapped markets, emerging trends, and customer demands that they might not have considered before. This can help them stay ahead of the curve and create new opportunities for growth.

Benchmarking

Competitive analysis allows travel aggregators to benchmark their performance against their rivals. It helps them understand how well they are doing compared to others in the industry, and where they need to improve to gain a competitive edge.

Product and Service Enhancements

By studying competitors' offerings, travel aggregators can identify gaps in their own products or services. This enables them to make necessary improvements, enhance customer experience, and stay competitive.

Pricing Strategy

Analyzing competitors' pricing strategies helps travel aggregators to optimize their own pricing. They can adjust their rates to be more competitive or differentiate themselves based on value proposition if they offer unique features.

Marketing Insights

By examining competitors' marketing tactics, travel aggregators can gain insights into successful marketing strategies and advertising channels. This allows them to refine their marketing efforts for better visibility and reach.

DISADVANTAGES

Overemphasis on Rivals

Over-reliance on competitive analysis can lead to a narrow focus solely on rivals, potentially causing travel aggregators to miss other significant market factors or innovative opportunities.

Information Inaccuracy

Gathering data on competitors may not always be accurate or complete, leading to misguided assumptions and decisions. Relying on incomplete or outdated data can be detrimental to the aggregator's business.

Imitation Trap

Simply copying competitors without understanding their strategy or the rationale behind their decisions can lead to a lack of differentiation in the market, making the aggregator just another me-too player.

Resource Intensive

Conducting thorough competitive analysis demands time, effort, and resources. Smaller travel aggregators may find it challenging to allocate the necessary resources for comprehensive research.

Ethical Concerns

In some cases, competitive analysis can lead to ethical concerns, such as spying on competitors or obtaining proprietary information in unethical ways. Travel aggregators need to be careful to follow ethical guidelines and respect privacy.

6. APPLICATIONS

Market Positioning

Competitive analysis helps travel aggregators identify their unique selling points and competitive advantages. This information enables them to position themselves effectively in the market, differentiate themselves from competitors, and target specific customer segments.

Pricing Strategy

By understanding competitors' pricing models, travel aggregators can adjust their own pricing strategies to remain competitive while maximizing profitability. Pricing intelligence can also help identify opportunities for offering discounted rates or value-added services.

Product and Service Development

Analyzing competitors' offerings allows travel aggregators to identify gaps in the market and unmet customer needs. This insight can inform the development of new products or services that cater to specific customer demands.

Marketing and Promotion

Competitive analysis provides insights into the marketing and promotional strategies of leading aggregators. This knowledge helps shape effective marketing campaigns and targeted promotional efforts to attract more customers.

User Experience Enhancement

Studying competitors' user interfaces, website features, and mobile app functionalities allows travel aggregators to improve their own platforms, making them more user-friendly and appealing to customers.

7. CONCLUSION

In conclusion, conducting a competitive analysis of travel aggregators offers valuable benefits and insights to businesses in the industry. It enables them to identify market opportunities, benchmark their performance, enhance their products and services, optimize pricing strategies, and refine marketing efforts. However, caution must be exercised to avoid overemphasis on rivals, reliance on inaccurate data, blind imitation, resource-intensive efforts, and ethical concerns.

A successful competitive analysis should be balanced, focusing on learning from competitors while maintaining a strong focus on the unique value proposition of the travel aggregator. By leveraging the knowledge gained from this analysis, businesses can adapt and evolve, remaining competitive and relevant in the dynamic and ever-changing travel market.

In essence, competitive analysis serves as a powerful tool for travel aggregators to stay ahead of the curve, better understand customer needs, and make strategic decisions that drive growth and success in a highly competitive landscape. By leveraging the strengths of their own offerings and integrating the valuable insights gained from studying their rivals, travel aggregators can position themselves for long-term success and provide exceptional value to their customers.

8. FUTURE SCOPE

The future scope for competitive analysis of travel aggregators holds significant potential as the travel industry continues to evolve and embrace technological advancements. Here are some prospects for this area:

Advancements in Data Analytics

As data analytics technology continues to advance, travel aggregators will have access to more sophisticated tools for competitive analysis. This will enable them to gather and process vast amounts of data from various sources, leading to more accurate and insightful market assessments.

Artificial Intelligence and Machine Learning

The integration of AI and machine learning in competitive analysis will revolutionize the way travel aggregators extract insights from competitor data. These technologies can automate the analysis process, identify patterns, and predict future market trends, giving aggregators a competitive advantage.

Personalized Offerings

With increased data availability and analysis capabilities, travel aggregators can offer more personalized services to their customers. By understanding competitor strengths and weaknesses, aggregators can tailor their offerings to meet individual customer preferences better.

Emphasis on Sustainable Travel

The future of the travel industry will likely see a significant focus on sustainability and responsible travel. Competitive analysis can help travel aggregators identify trends related to eco-friendly accommodations, transportation options, and environmentally conscious practices to align with evolving consumer preferences.