Project Report

1. Introduction:

1.1 overview:

The role of an online travel agency (OTA) is becoming increasingly important in the

Accommodation industry as they provide a convenient way for travelers to arrange their stay.

From the comfort of their home, travelers can compare hotel prices and book them over the

internet.

An online travel agency (OTA) arranges and sells accommodations, tours, transportation and

trips on an online platform for travelers. They are third parties who sell services on behalf of

other companies .Usually, these OTAs offer many benefits with added convenience with more

of a self-service approach. They also include a built-in booking system which allows instant

bookings. How Do Online Travel Agencies Work?

1. Merchant Model In this model, hotels sell rooms to OTAs at a discounted or wholesale

price. Then, the OTA sells them to the customer at a markup price

2. Agency Model This is a commission-based model where OTAs acts as a distribution partner.

OTAs receive full commission after the stay has taken place.

The hotel directly receives the payment from the end customer and does not wait for the

payment transfer from third-party distributors. What Are the Benefits of Partnering with Online

Travel Agencies? In one word – exposure!

Online travel agents get thousands of website visitors from all over the world. Plus, they have

positioned themselves as an authority on everything related to travel. So, people trust the

recommendation they receive from OTAs. By listing in OTAs, accommodation businesses like

hotels not only reach a vast set of audience but will also find their service among many other

reputable sources of information In addition, hotels that are listed on OTAs can also benefit

from what is referred to as the 'billboard effect'. This means that OTAs provide a form of

advertising for service providers such as hotels on their platforms. Once the user gains this

awareness, they may even go to the website of that particular hotel to make a direct booking.

What Are the Advantages and Disadvantages of Selling Through Online Travel Agents?

Accommodation businesses like hotels and B&Bs have pros and cons of getting listed in OTAs.

- ***Advantages Of Online Travel Agents :***

Low-cost method of selling accommodation services Reduced online marketing spend as

OTAs invest in advertising to attract potential customers Impartial reviews give customers the

confidence to book Users can easily compare various accommodation costs at one place Digital

marketing packages - how to build one !

- ## ***Disadvantages Of Online Travel Agents:***

Commission rates are charged on every sale. It can range between 10-15% of the gross cost

Restrictive cancellation terms Even if accommodation businesses use OTAs, the need for their

own website and booking engine does not go away Investment in a balanced multi-channel

strategy may be needed to boost sales Online tarvel industry.

Even though OTAs can help to fill your rooms, accommodation businesses must try to

maximize revenue through their own website. Consistent work on search engine optimization

tactics and other digital marketing techniques is a must. Accommodation businesses must focus

on customer retention techniques and directly target their existing customers through emails

and direct marketing. How to start an online tarvel agency Travel agencies no longer inform

customers about the availability of flights and rooms. They issue rooms and get a commission

from the respective accommodation businesses. That is why most of the new travel businesses

follow the OTA model.

If you plan to enter the OTA arena, you can specialize in pilgrimages, leisure travel, business

travel or any niche. But, focusing on how effectively you offer things is the key to success.

Here Are Some Points You Have To Consider When Starting An Online Travel Agency

Register the name of your agency and if applicable,

take a license as per your local laws Try to get a membership in IATA or any other reputed

travel organization

Gain more knowledge about the travel industry

Get your travel website designed by a professional company like ColorWhistle

Focusing on a particular niche will also bring more success Publicize your business in the

online space Utilize the power of blogging Create a good social media presence Why Do People

Use Online Travel Agencies? Few OTAs offer reward programs which can be used for future

travel needs Special rates which cannot be found elsewhere Some OTAs may have generous

cancellation policies. For example, Priceline does not offer any penalty if the user cancels the

ticket until the end of the next business day Most users may not have an idea on where to book

other than an OTA OTAs make it easy to compare different rates

A travel aggregator is a website that finds travel offers and prices across multiple sources and aggregates them all in one place. This helps users find the best prices out of all the results the aggregator has found. It is easy for consumers to know that they are booking at the lowest price possible.

2.THEORITICAL ANALYSIS:

2.1:Block Diagram:
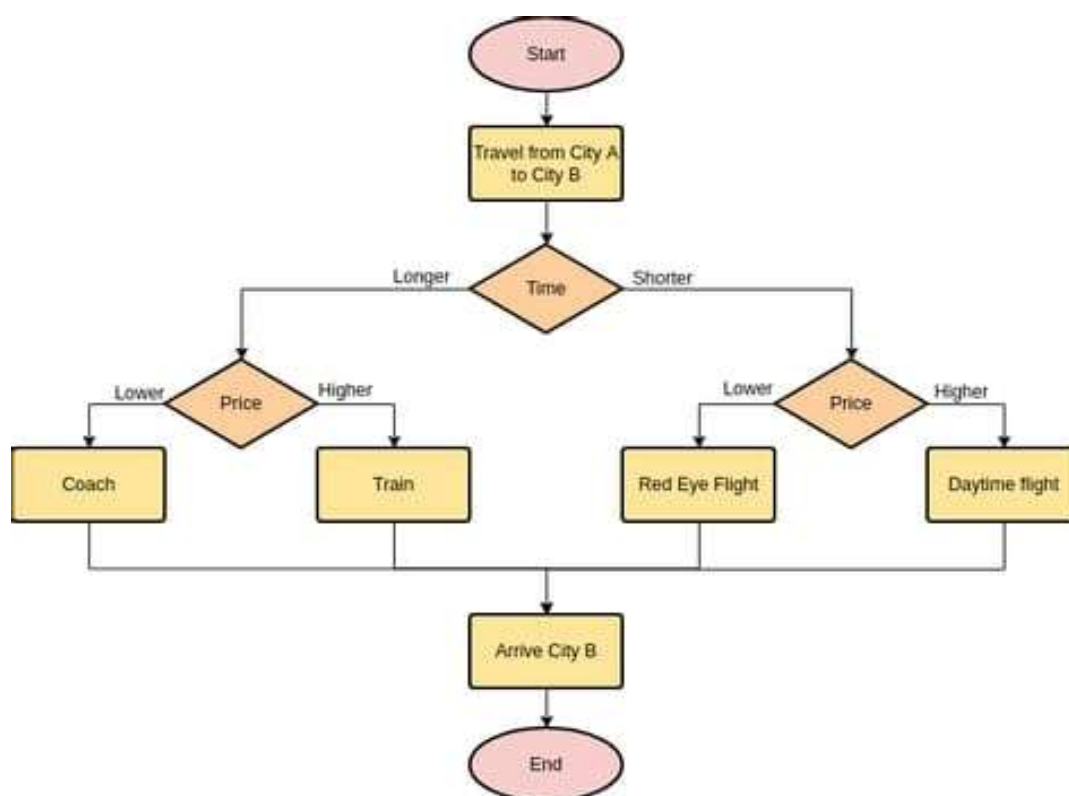
2.2:**Hardware/software Designing :**

Functional Requirements : Python libraries:-
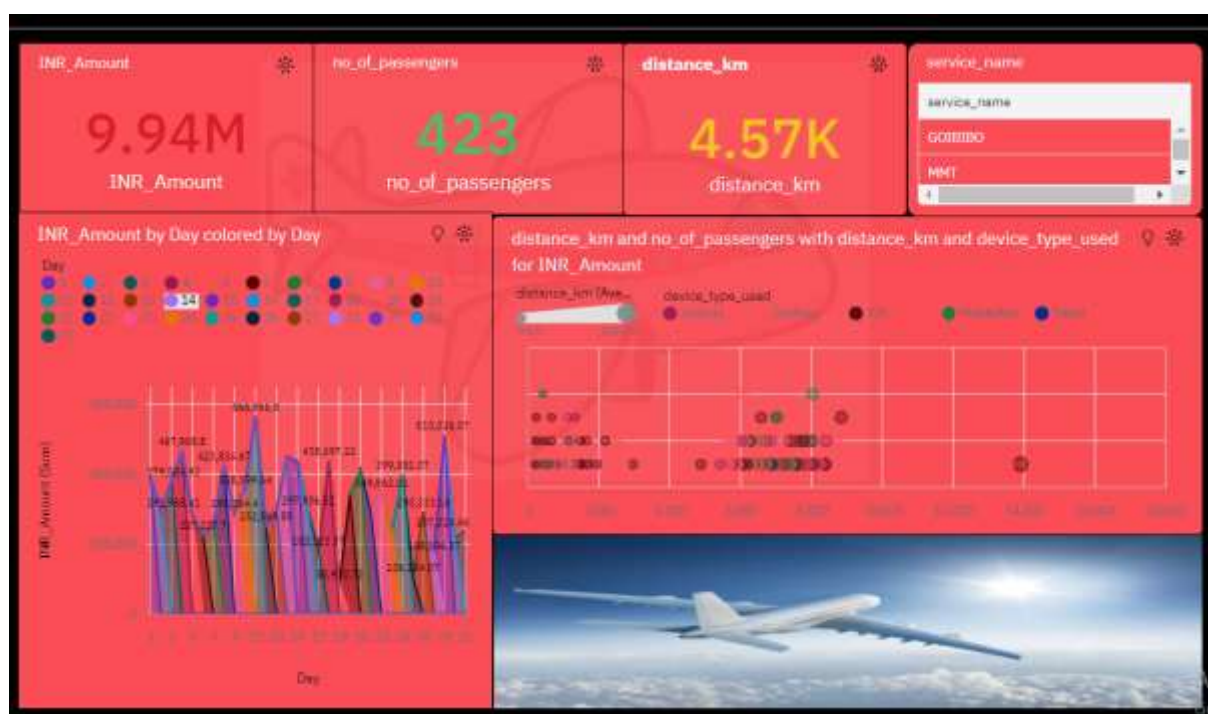Numpy,Pandas,Plotly,Matplotlib,Seaborn,Geo pandas.

Development Environment: Ms Excel, Pycharm, Jupyter Notebook.

External interface Required : Google News API, Streamlit.

Operating Environment: MacOs, Windows.

Deployment Environment: Streamlit.

3. Analysis:

From above Visualisation we can observe that total revenue generated per day . The number of passengers who booked the tickets for travelling by using different device types like Android,Desktop,IOS,Mobile web, Tablet form different services like GOIBIBO,MMT....

- Across all the days the sum of INR_Amount is Over 9.9million
- The Summed values of the INR_Amount ranges from nearly 86 thousand to almost 567 thousand.
- no_of_passengers is unusually high when the values of distance_km are 8036,6053,8844,7027,7010 and more .
- There is reliable relationship between no_of_passengers and distance_km.
- The overall number of results for distance_km is 339.
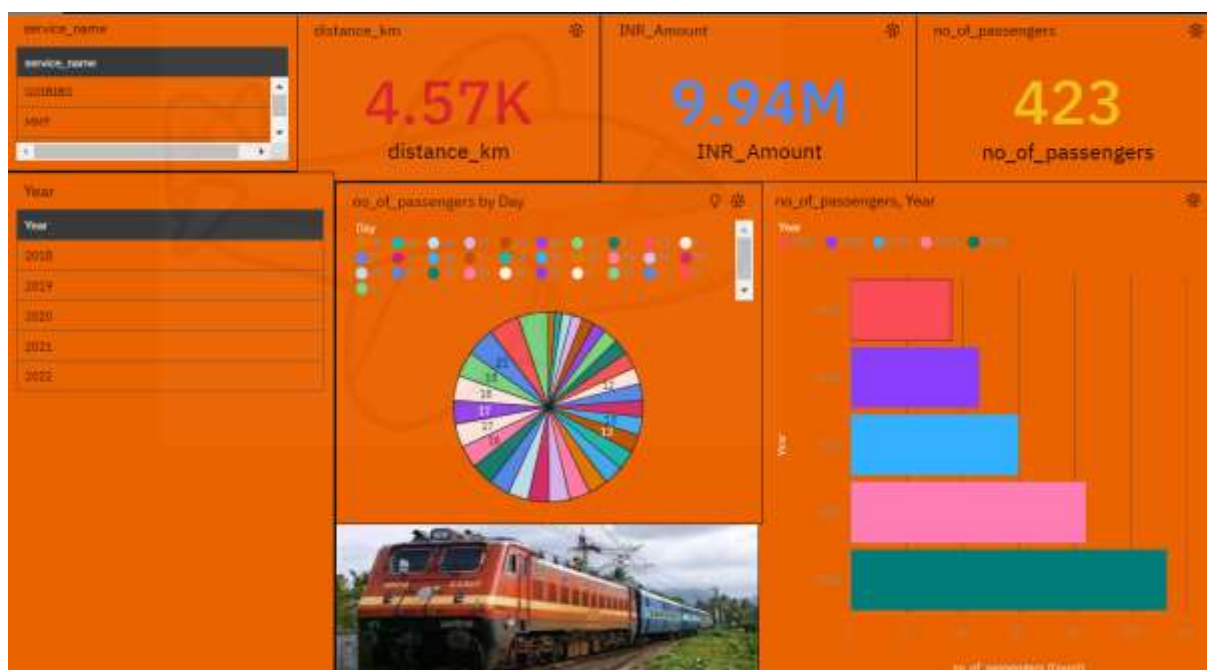
From the above two Visualisations we can observe that Total number of passengers who booked the tickets for travelling in a per and per year and total revenue generated based on their destinations .Based on the current forecasting the no_of_passengers may reach 68.82 by year 2023.

- From 2019 to 2020 the no_of_passengers was increased by 88%
- 2020 is the most frequently occurring category of year with a count of 113 with no_of_passengers value (33.3% of the total)

- Based on current forecasting no_of_passengers may reach10.22 by day 38.
- Over all days, the sum of no_of_passengers is 423
- No_of_passengers ranges from 5, when the day is 19 to 22, when the day is 9

4.Applications:

- By using Data analysis, we can easily say the how many number of passengers booked their tickets in relevant days and year.

- Can be determining in which year the bookings was more.

- Can be determine how many number of passengers

Book their tickets for their journey in particular day.

- Can be determine which type of transport they are booking.
- Can be determine which device type they are using for booking tickets, and total how many members were booking in that particular day or year.

- Can be determining which service names they are using like example GOIBIBO, MMT

- Can also be determine at which destination no_of_passengers were travelled

5.conclusion:
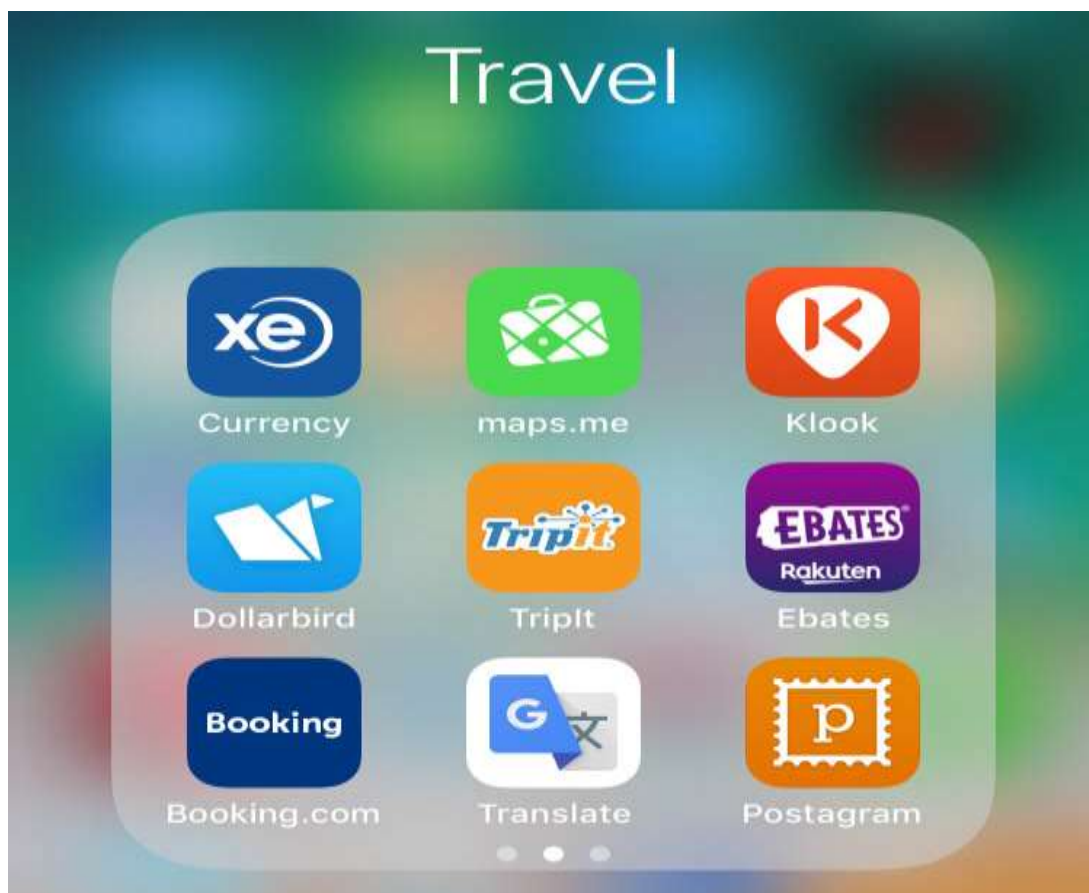
There are many number of Travelling Apps which are used to book the Tickets :

- "Travel and Tourism management" simplifies management process in travelling.

- Fast processing and immediate results with high security.

- Minimizing Human effort and cost efficient databases.

- Business travel is a highly valuable part of the travel and tourism industry.

- Not only does it continue to grow , but average spending by business travel customers is higher than in retail sector