

## Data Analytics Process: Real World Application

### Example:

**Travelling to Coimbatore, Tamil Nadu from Rajkot, Gujarat.**

#### 1. Plan –

The traveller has to first decide by which means he/she is going to travel.

There are 3 ways :

- a. Airways (flight)
- b. Railways (train)
- c. Road (car/bus)

#### 2. Prepare –

Travelling by road for a very long distance (1970 km, 33 hr) is not feasible as it would take more than 3 days (without halt) to reach the destination. Moreover, there are no direct buses from Rajkot to Coimbatore.

So, travelling by road is ruled out.

Now the traveller is left with two choices:

- a. Flight
- b. Train

#### 3. Process –

If the person wants to reach the destination as soon as possible, then the only way is travelling by flight because train would at least take 2 days to reach.

Moreover, if the person is willing to pay the required amount of money for travelling by flight, then he will reach his destination within one day.

Let us assume that the traveller is interested to travel by flight.

There are many flights that connect Rajkot and Coimbatore.

In order to proceed the traveller must choose by which flight he wants to travel.

Some of them are as follows:

- a. Indigo
- b. Star Air
- c. Spice Jet
- d. Air India
- e. GoAir

After he chooses by which flight he wants to travel, he can directly check the flight availability from Rajkot to Coimbatore on either the official site of the flight or any other travel company's site like MakeMyTrip.

For example, if he chooses to travel by Indigo, then he has to visit [www.goindigo.in](http://www.goindigo.in) and enter the details asked by that site.

After he enters, he will be able to see the availability of flights on the day that he chose.

If there are no flights available from Rajkot to Coimbatore on that day, then one of the alternatives is to travel from Rajkot to Chennai by flight and then from Chennai to Coimbatore by car/bus/train.

#### 4. Analyze –

Now, consider the excel sheet named “Indigo” that contains list of Indigo flights in the month of August, 2022.

This sheet contains all the Indigo flights’ details that fly from Rajkot to Coimbatore and Chennai. A pivot table has been created using this data that denotes the number of flights available on each day. The pivot table is present in the “No.of flights” sheet.

If the traveller decides to travel on 16<sup>th</sup> August, 2022, then the available flights are:

<b>16-08-2022</b>	<b>Tuesday</b>	<b>Rajkot (RAJ)</b>	<b>Chennai (MAA)</b>	Indigo	9
			<b>Coimbatore (CJB)</b>	Indigo	3

There are 3 flights from Rajkot to Coimbatore.

The details of those 3 flights are present in the sheet named “16th Coimbatore” as well as below:

Date	Day	Flight	Departure from	Arrival at	Time of departure	Time of arrival	Layover at (if any)	Layover time (if any)	Total Duration	Price (INR)
16-08-2022	Tuesday	Indigo	Rajkot (RAJ)	Coimbatore	14:20:00	19:25:00	Bengaluru (BLR)	1h 55m	5h 5m	12488
16-08-2022	Tuesday	Indigo	Rajkot (RAJ)	Coimbatore	12:40:00	20:35:00	Mumbai (BOM)	5h 0m	7h 55m	9916
16-08-2022	Tuesday	Indigo	Rajkot (RAJ)	Coimbatore	09:45:00	21:20:00	Delhi (DEL)	7h 10m	11h 35m	16268

If the traveller wants lowest fare, then he can travel by 12:40:00 flight which reaches the destination in 7 hours and 55 minutes.

If he wants to reach in minimum amount of time (5h 5m), then he can travel by 14:20 flight that will cost 12,488 INR.

#### 5. Share –

After deciding what kind of fare the traveller wants, he can either call the service provider of the flight and communicate his interests, or else he can directly visit the official site of the flight and find the details of the flight himself.

He can also opt for the seat if he wants and also various prepaid meal that is present in the flights.

#### 6. Act –

Finally, after deciding the flight, he can book a ticket either by calling customer care of the flight or else by visiting the official site followed by payment.

After payment he will receive a confirmation message/mail and the ticket is booked!

He can download the ticket from the site or from the mail received.