1. Additional Research and Assumptions

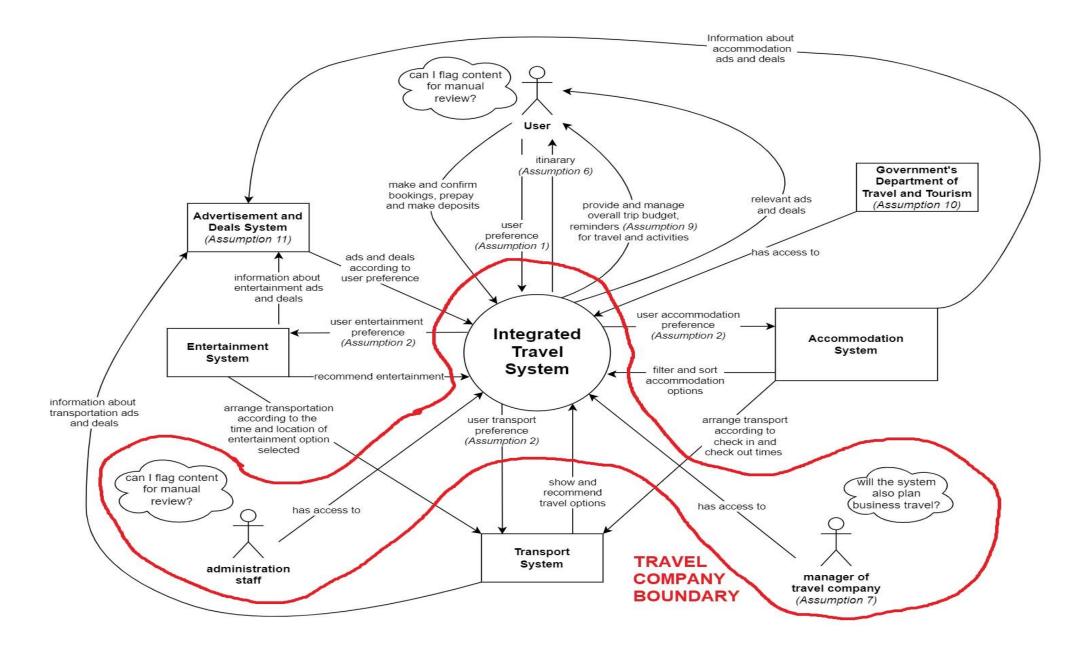
For this particular case study, I have taken an inspiration from the working of a website called "MakeMyTrip" It's an Indian online travel company founded in 2000. The company provides online travel services including air tickets, domestic and international holiday packages, hotel reservations, railway and bus tickets". I have referred to two amazing case studies on "MakeMyTrip" (Wane 2013) and (Barapatre 2014) available on the internet and have built my case study accordingly.

Assumptions:

- Assumption 1: user preference covers everything from dates and times of travel, overall budget, accommodation preference, travel preference, entertainment
- Assumption 2: The integrated travel system will split the user preference into 3 categories: user accommodation preference, user transport preference and user entertainment preference and sent these three preferences to accommodation system, transport system and entertainment system respectively.
- Assumption 3: user accommodation preference covers everything from type of accommodation, budget, location, facilities, stars, room capacity
- Assumption 4: user transport preference covers everything from mode of transport, budget, facilities, preference and any other preferences as stated by the user
- Assumption 5: user entertainment preference covers everything from type of entertainment, budget, location, facilities, dates, time, age
- Assumption 6: Itinerary will contain all the recommended travel, accommodation and entertainment options based on the user preference
- Assumption 7: There is a 'Manager of Travel Company' who manages the employees.
- Assumption 8: The travel company taken under consideration is a small to medium scale company. It has around 10 employees and 1 manager.
- Assumption 9: The system will send a reminder to user 8 hours before the time of travel or entertainment. e.g.: If user has a flight on Monday at 22:00 hrs, the system will send a reminder to user at 14:00 hrs.
- Assumption 10: There is a 'Government's Department of Travel and Tourism' under which the 'Holiday Entertainment Luxury Leisure Organiser' company is listed.
- Assumption 11: There is a separate "Advertisement and Deals System" which will have information about all the ads and deals on offer. It will generate relevant ads and deals for user based on the user preference.

If this case study was a real-life situation, then it would be best to have a meeting with the stakeholders and discuss with them about the system they want to build. This would have resulted in better understanding the business, stakeholder's expectations, the system, it's intended use and would definitely help in removing the ambiguity involved. I think that a proper in depth analysis of a similar system would also help in getting a fair idea. The limitations of a previously existing system could be identified and we could try to overcome these limitations in the new system we are building. By doing all this, I think the assumptions that I am taking under consideration would be first clarified by the stakeholders. This would definitely help in building a good and precise system with no confusion.

2. Rich Picture



I have identified "Travel Company Boundary" as a company boundary. The entities inside that boundary are the administration staff, manager of travel company (assumption 7) and the integrated travel system. I have not included other entities in this boundary because the "Holiday Entertainment Luxury Leisure Organiser" company as mentioned in the case study will only have the administration staff, manager (assumption 7) and Integrated Travel System as a part of that company. The admin staff and manager (assumption 7) will have an access to Integrated Travel System through which they will manage the bookings of their clients. Other entities like Transport, Entertainment will not be a part of this boundary as they are not a part of the company. By looking at the "Travel Company Boundary", one can easily figure out which entities are a part of the company and which are not

3. System Vision

Problem Description

This integrated travel system will provide users with a travel itinerary consisting of transport, accommodation and entertainment options based on the user's preferences (Assumption 1). The system will provide a way to manage and confirm bookings, pre-pay or make deposits, provide overall trip budget and will also provide reminders for travel or activities. It will also provide users with certain advertisements or deals which will suite their liking based on the user's preferences (Assumption 1).

System Capabilities

- The system will find and display the best possible options of transport, accommodation and entertainment as a single itinerary (Assumption 6) based on the user's preferences.
- Users can make and confirm bookings, pre-pay and make deposits.
- System will provide and manage overall trip budget.
- System will provide reminders for travel and activities.
- System will manage the prepurchase and booking of entertainment option selected by user
- System will offer relevant deals and advertisements to users based on their entered preferences.

Business Benefits

- Users will instantly get the entire itinerary (*Assumption 6*) including accommodation, transport and entertainment for their trip by just entering their preferences like travel destination, dates, etc. No need to visit different websites for different things (like visit airline website for flights, hotel website for accommodation, etc.)
- Users will be able to book and pay for their entire trip at one place including the fees
 for transport, accommodation and entertainment. They don't have to go individually
 to different websites to book and pay for different things like flights, hotels, etc. The
 Holiday Entertainment Luxury Leisure Organiser company can get some commission
 out of this transaction for providing this service.
- Users will get an overall trip budget from the system based on their preferences. Thus, different types of trips can be recommended and booked ranging from budget friendly cheap backpacker trips to luxurious holidays.
- The reminders (Assumption 9) sent by system to user regarding travel and other activities will ensure that the user on a vacation does not miss out on anything he/she has booked or planned to do when on the trip.
- The users can save on their trips by choosing the deals given to them. The transport/accommodation/entertainment providers can get new customers who have chosen them just because of the deal they offered. The Holiday Entertainment Luxury Leisure Organiser company will get revenue generated through these ads.

4. Stakeholder Analysis

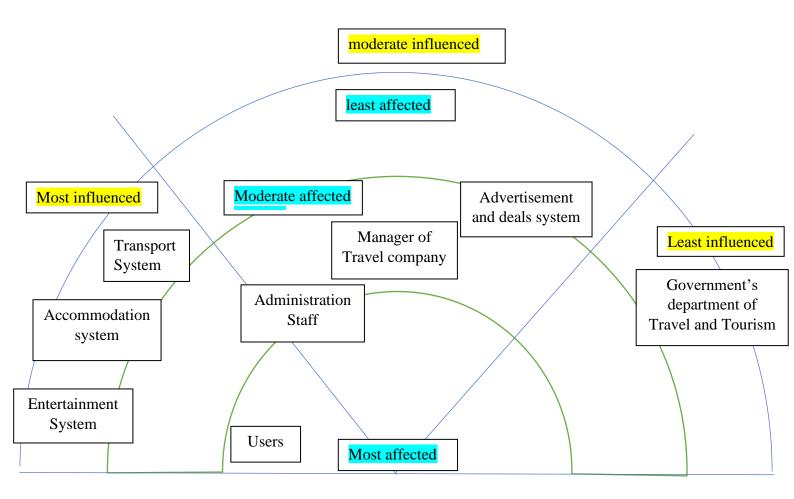
Stakeholders:

- <u>Transport system</u>: Provide information about different transport options available that users can take on their trips based on their user transport preference (*Assumption 4*).
- <u>Accommodation system</u>: Provide information about different accommodation options available that users can take on their trips based on their user accommodation preference (*Assumption 3*).
- <u>Entertainment system</u>: Provide information about different entertainment options available that users can take on their trips based on their user entertainment preference (*Assumption 5*).
- <u>Users:</u> The general public who interact with the system. They will enter their details, user preferences, budget into the system and the system will give them an itinerary (*Assumption 6*) based on their user preference.
- <u>Administration staff:</u> The staff of "The Holiday Entertainment Luxury Leisure Organiser company" who are basically the company's employees. They also use the same Integrated Travel System for their daily work.
- <u>Manager of Travel Company (Assumption 7):</u> An employee of "The Holiday Entertainment Luxury Leisure Organiser company" who is in-charge of the Administration Staff. He will also have an access to the Integrated Travel System.
- Advertisement and deals system: It will have a collection of ads and deals stored in it which it will receive from transport, accommodation, entertainment providers. Based on the user preference, it will display ads and deals that the user might find relevant.
- Government's Department of Travel and Tourism (Assumption 10): This is a government body that looks after the travel and tourism affairs in its respective jurisdiction. "The Holiday Entertainment Luxury Leisure Organiser" company is listed under the Government's Department of Travel and Tourism. The department has a direct access to the company's affairs and the company has to work under the framework laid down by the Government's department. It has to abide all the laws made by the said Government's Department.

Stakeholder Classification

	Operational	Executive	
Internal	Administration Staff	Manager of Travel Company	
		(Assumption 7)	
External	Transport System, Accommodation	Government's Department of Travel and	
	System, Entertainment System,	Tourism (Assumption 10)	
	Users,		
	Advertisement and deals system		

Rainbow Diagram



<u>Users</u>: I have put users in External operational category. They are operational because they will be interacting with the system quite frequently from their trip planning stage to the stage when they are actually on the trip. So, they will have to interact with the system for planning the trip to get an itinerary based on their recommendations, use the system to make payments and deposits, the system will also send a reminder to user regarding their travel and activities while they are on the trip. They are external because the users are not a part of "The Holiday Entertainment Luxury Leisure Organiser Company." I have put users into "most influenced" quadrant of rainbow diagram as the system is made for the user. I have put users into "most affected" quadrant of rainbow diagram because the system will have a much greater impact on the user compared to all other stakeholders.

Manager of Travel Company (Assumption 7): I have put the manager of Travel company as internal executive. Internal because he is an employee of "The Holiday Entertainment Luxury Leisure Organiser Company". Executive because he will not interact with the system that frequently. But he will have full access to the system. He might only interact with the system in scenarios where he will get involved. These scenarios would mostly be the ones which the administration staff will not be able to handle; like a user wants to cancel his bookings, user wants to change his date of travel. I have put the manager of Travel company into "moderate influenced" quadrant of rainbow diagram because the manager will not have that much power over the system. I have put the manager of Travel company into "moderate affected" quadrant of rainbow diagram because the system will not have a very critical or crucial impact on the manager when compared to users.

5. Event Table

Sr No	Event Name	Type	Source	Condi tion	Trigger	Activity / Action	Response	Destination
1	Enter User Preference (Assumption 1)	External	User	n/a	User enters his preferences and clicks 'next'	Create a file called user preference	Send a user acknowledgement stating that their preferences are noted	Integrated Travel System
2	Itinerary (Assumption 6) received	External	Integrated Travel System	n/a	All the recommendations from travel, accommodation and entertainment systems are received	Combine the recommendations from travel, accommodation and entertainment systems into one document and display it to user	Display the travel itinerary as a single document to user	User
3	Payment for the trip	External	User	Check if Amount >0	User enters the amount and clicks 'pay'	Accept payment from the user	Send user a payment receipt.	Integrated Travel System
4	Provide Reminders (Assumption 9)	Temporal	Integrated Travel System	n/a	8 hours before the scheduled transport / entertainment time	Scan through itinerary (assumption 6) and find travel/entertainment scheduled 8 hrs after	Send a notification reminder to user	User
5	Recommend Travel Options	External	Transport System	n/a	Receive user transport preference (assumption 4) from Integrated Travel System	Scan through different websites, sources and come up with the best possible travel options in sync with user's transport preference	Send the recommendation to Integrated Travel System	Integrated Travel System
6	Recommend Accommodation Option	External	Accommodation System	n/a	Receive user accommodation preference (assumption 3) from Integrated Travel System	Scan through different websites, sources and come up with the best possible accommodation options in sync with user's accommodation preference	Send the recommendation to Integrated Travel System	Integrated Travel System

7	Recommend Entertainment Option	External	Entertainment System	n/a	Receive user entertainment preference (assumption 5) from Integrated Travel System	Scan through different websites, sources and come up with the best possible entertainment options in sync with user's entertainment preference	Send the recommendation to Integrated Travel System	Integrated Travel System
8	Link check-in, check-out times with travel options	State	Accommodation System	n/a	Receive check-in, check out times from accommodation system	Based on the check in and check out times, arrange for a suitable travel option	Send the recommendation to Integrated Travel System	Transport System
9	Link entertainment times with travel options	State	Entertainment System	n/a	Receive starting and ending times of entertainment from entertainment system	Based on the starting and ending times of entertainment, arrange for a suitable travel option	Send the recommendation to Integrated Travel System	Transport System
10	Generate ads and deals according to user preference	External	Advertisement and deals System (Assumption 11)	n/a	Receive all the ads and deals from transport, accommodation, entertainment systems	Based on the user preference (assumption 1), select relevant ads and deals for the user	Send the ads and deals to Integrated Travel System	Integrated Travel System

I have included "Link check-in, check-out times with travel options" and "Link entertainment times with travel options" as a State Event because, the travel options will depend on the check-in, check-out times. Eg: if a certain hotel has check-out at 10am, then it will be ideal for the user to get a train which departs at 11:00am over a train that departs at 1:00pm. Similarly, the travel option will also depend on the starting and ending times of the entertainment option selected by a user. Eg: if a certain theme park opens at 8:00am in the morning, then the user should have a travel option that will take him to the theme park at around 7:30-8:00am.

6. Reference List

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