

Cleartrip Hotel section usability report

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1. Executive Summary

Usability study was conducted for the Hotel section of cleartrip.com. The usability study was an attempt to identify the problems on the Hotel section of cleartrip.com. Since this study was conducted individually it can statistically reveal 30 -40% problems on the hotel section of the website[1,2].

A total of 5 participants participated in the study. The tests were for an average time of one hour. All the five participants agreed to be a part of the study on voluntary grounds and were not paid any compensation for the participation. Each participant went through two scenarios. Every scenario had 3 tasks with number of steps in each task. The participants were asked to utilize the think aloud protocol.

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3. Introduction

Test description

A formal usability study was conducted on www.cleartrip.com. This study was conducted to identify the usability problems on the hotel section of the website. The test was conducted at a residence and thus had a peaceful environment without any disturbance. 5 participants agreed to participate in the study. A live observation of the study was conducted and important points observed during the usability study were noted on a scribbling pad. There was no audio or video recording during the usability study. A total of 6 tasks divided equally in 2 scenarios were performed by the participants. A pre-study questionnaire and a post study questionnaire (appendix 1) were completed by all the participants. The consent forms were available but due to confidence in the instructor the participants did not feel the need to sign the forms.

Test objectives

The following were some of the questions answered by the usability study

- If the user interface is too overwhelming for the user?
- If the filters are discoverable and usable?
- If the room rates selection should be moved away from this step to a later stage in the booking process?
- If map view is discoverable?
- Is it easy to use the map view?
- Any other feature which may be desired in the entire Hotel section product?

User profile summary

The users of the Hotel section of the website have been picked from a range of user groups as described below. This data has been derived with the help of pre-usability survey and thus reflects the results of pre-usability survey.

- **Young user group**

This includes students as well as youngsters from the age of 18 to 40. In this study this user group was assumed to be very technology savvy and had used travel websites in the past. 3 users from this category were recruited.

- **Young-senior group**
This group includes users from the age group of 40 to 60 and were familiar with the usage of internet and computer. However they were not as technology savvy as the young group. This user group could be a first time travel website user or a seasoned travel website user. In this study this user group was assumed to have used travel website previously. 1 user from this category was recruited.
- **Senior group**
This group includes user from the age group of 60 and above. This group started using the computers lately and are the least efficient in the usage of computers when it comes to comparison with the above two groups. In this study this user group was assumed to be a person who travels quite often and uses other means of booking like travel agents for booking the vacation. 1 user from this category was recruited.

4. Test Preparation Summary

Testing schedule

1 week was allotted for the testing to be conducted. Recruiting was carried out by telephonic, e-mail or chatting conversations with the voluntary participants.

Session length summary

The total duration of each usability study was one hour on average. This hour was divided in the following tasks:

- Introduction to the usability study and brief mention about cleartrip's business.
- A pre-test questionnaire was given to the users to understand their user profile.
- On completion of questionnaire the users were explained about the directions to be followed during the usability study and the usability study was started.
- On completion of usability scenarios and tasks by the participants they were requested to fill a post usability survey questionnaire.
- A short interview session to seek some insights into the recommendation.

Test set-up

Hardware

- MAC Laptop
- Windows desktop
- Windows laptop

The user were allowed to have the configuration and the laptop of their own choice to develop a familiarity with the hardware to alleviate the unfamiliarity of the usage of cleartrip website.

Software

The software's used in this usability study comprised mainly of the internet browser used by the user. Internet browsers were of participant's choice and no restriction was imposed on the usage of a particular browsers.

Testing Scenario

Two scenarios were prepared. The scenario and the rationale behind usage of specific scenarios are described below. The scenarios had a maximum of 3 tasks with number of steps ranging from 3 to 6. These steps and tasks were prepared keeping 3 levels of difficulty in mind easy, intermediate and difficult. A balance has been maintained in the distribution of the tasks to maintain uniformity in the evaluation. A mention at the end of every sentence describing the step's level has been provided in the description of tasks below. Low number of steps and tasks were kept to respect the time given by the participants voluntarily to complete the entire usability study. Another rationale which can be provided was to not engage a participant in the flow of events which could frame a specific mindset of the user and thus would have provided some resistance to free flow of thoughts for the future tasks. An attempt has been made to make the study based on qualitative evaluation rather than quantitative evaluation. A quantitative evaluation can have the Hawthorne effect on the participants as they would feel more pressurized to complete the tasks as soon as possible in order to compete with other participants. Therefore having these points in mind it was decided to have more qualitative rather than quantitative.

Scenario 1

You are a senior manager working for a MNC and the company asks you to make a trip to help a client based in Bombay. It's a three day trip. The company asks you to make the booking on your own at any hotel in Bombay. Location is near Navi Mumbai. Budget has been fixed. The company asks you to make the arrangement yourself in that budget.

Rationale

A typical traveler visiting cleartrip website could be using website to book a hotel for business or personnel trip. This scenario was prepared keeping in mind the business oriented visitors on the cleartrip website. Bombay was chosen as a city as it is the economic capital of India. The location of Navi Mumbai was chosen assuming the headquarters of the clients were near Navi Mumbai.

The 3 tasks belonging to this scenario are explained below along with the steps as well as rationale behind usage of steps. A bold word reflects the level of difficult of the tasks which have been divided into three levels as mentioned previously.

Task 1:

Step 1: Go to cleartrip.com

Step 2: Click on the hotel section of the website

Step 3: Search for a hotel in bombay for a period of 3 days. **Easy.**

Step 4: The budget for the 3 day trip is 17,000 per day. **Intermediate.**

Step 5: Select a 5 star hotel. **Intermediate.**

Step 6: keep a list of hotels with more than 3.5 travelers rating (rating). **Difficult**

Rationale

Step 3 had Bombay as a city as it is the economic capital of India. The name was intentionally spelt wrongly to see how the user responds to the error messages on the website. Step 4 had a very high end of budget to check the methodology participant uses to book a hotel in a specific range. The range was kept high as companies usually pay for hotel reservations for employees. 5 star hotel was kept in step 5 as the manager of a MNC would usually book a premiere hotel in the city. Step 6 was concerned with traveler rating as there was a deliberate attempt to confuse the user with the overall stars of the hotel.

Task 2:

Step 1: Having a list of hotel's within this price range start the task 2.

Step 2: Get the hotel which is within close proximity of Juhu area. **Intermediate.**

Step 3: Go to the hotel details of the hotel you have chosen. **Intermediate.**

Step 4: Select any of the hotel having 24 hour help desk. **Intermediate.**

Rationale

Step 2 had Juhu instead of Navi Mumbai to let the user have a feel of the filters on left of the screen and also to see if the user is prompted by some other means like the use of map to select a hotel in a specific area. Step 3 was kept to see how the user gets to hotel details, this step was considered after observing that there was a redundancy in links to hotel details on the website (a user could see the hotel details either by clicking on the hotel name or clicking on the link labeled as details just below the stars of the hotel). Step 4 was kept to observe how a user could navigate to the fine details of the hotel which are a part of the detail link below the stars of the hotel.

Task 3

Step 1: Having the same hotel of your choice

Step 2: After selecting the hotel let's assume you did not like something about the hotel on the website. You would restart your hotel search by looking for a hotel in the same area. **Intermediate**

Step 3: After choosing the hotel please report the name of nearest landmark (any place) and bus stop nearby. Report the names to the instructor. **Difficult.**

Rationale

The step 2 of the task was kept to see how a user reacts to the disappointment felt after not finding a hotel of their choice. This step was an attempt to see if the user can have a smooth experience to look for a hotel with some of his/her desired amenities. The main points which were considered here included the ease of finding the map on the website. To see if user adopts some alternative strategy to look into a hotel in the nearby area. Step 2 and 3 were also to observe the usage of the map once a user is in the detail section of the website or the map beside the list on the top of the website.

Scenario 2:

You want to go for an individual vacation. It's a one week long summer break you take every year. You decide to visit London this year. You have never been to London and this time you decide to be adventurous and go alone. You open cleartrip.com and start exploring various hotels in London. You have no idea about the famous spots or tourist spots in London. The budget is fixed.

Rationale

As mentioned previously. The other branch of classification for the visitors on cleartrip website could be for users trying to book a hotel for their personnel trip. This could be either being with family or individual vacation. In this usability study individual vacation was used to make the scenario to simplify the thinking which may involve participant while framing their mind for a trip. A family trip is usually bound with more constraints than an individual, adventurous trip and we did not want to burden our participants cognitively while working on the tasks. London was chosen as a destination since it is a famous tourist spot and has many hotels's to choose from. More number of hotels would have meant a thorough usage of the features on the cleartrip hotel section. Alternatively some other tourist destination city could have been chosen as well. A middle class earning individual was kept in mind while making this scenario and therefore budget was very important for the person unlike the last scenario where the company was paying for the trip. The transition from scenario 1 to scenario 2 also was testing if the user considers utilizing the secondary search option on the same result page (modify search).

Task 1:

Step 1: Go to cleartrip.com

Step 2: Select the hotel section.

Step 3: Select London as a city for hotel. **Easy.**

Step 4: You are on a maximum budget of 6000 rs per day. **Easy.**

Step 5: find a hotel close to Heathrow (don't care about the amenities). **Easy.**

Rationale:

Step 4 was kept as Rs 6000 per day in London would be considered as a very frugal budget keeping the scenario details as explained previously into consideration. Also a person going on an individual trip would not care much about the amenities of a hotel and would just concentrate on getting a hotel in the price range.

Task 2:

Step 1: If hotel meets the above criteria's keep that list ready and move to next step

Step 2: Check if the hotel has a restaurant. **Intermediate.**

Step 3: Locate the nearest train station and report the name. **Difficult.**

Step 4: Find the percentage given as a result of previous traveler rating. **Difficult.**

Step 5: Report the number

Rationale

Step 2 would help us identify if the information on the website is consistent and also if the symbols related to restaurant are something the user comprehends easily. Step 3 was kept to check the usage and navigation of the map section of the website. Train was specifically chosen to be located on the map to check the efficacy of the usage of the symbols on the website. Step 4 was kept in order to see how a user is successfully able to locate information which may be useful for the individual booking a hotel with low or no stars, therefore the feedback of individual translated into the percentage can be very useful. Although it was assumed that the visitor could get confused with the travel advisor rating.

Task 3:

Step 1: Find and report the price of the cheapest hotel in London. **Intermediate.**

Step 2: Find and report the name of the hotel with highest trip advisor rating.

Intermediate.

Step 3: Search for a hotel named Houslow. **Intermediate /difficult.**

Rationale

Step 1 in this task was kept to test the sort feature of the website. It was initially observed that cleartrip picks was not a very obvious sort feature to be implemented by the user and the presence of such a feature was reflecting inconsistency. Another hypothesis to be tested here was the intuitive usage of clicking on specific sort by feature to arrive at the sorted list. The idea behind reporting a specific hotel name in step 1 and step 2 was also

to take the user away from the filters which the user may have used several times during the study and to observe if the user is utilizing the features meant to get the specific result. Step 3 was to check the consistency of error messages in delivering the right message to the user and redirect to search the right way or modify the search. It was also to check if the user was able to use the search hotel option on the result page of the website.

5. Secondary research and summary of evaluations

There are numerous travel websites offering various products on their website. The major categories of the products are air, hotel, holidays and train booking. Cleartrip has the products for air, hotel, train and a few holiday packages. A cleartrip press release has stated cleartrip to be amongst the top three online travel companies in India with 30% market share. With the growth of world wide web, Online Hotel reservation has become easier and most popular task. Analysts have targeted the Indian travel industry to expand to \$6 billion dollars till 2010.

10 travel websites were accessed for their functionality related to the hotel section of their website. Nielsen and Jacob heuristic evaluation[1,2] study on usability with respect to interface were used to set up the guidelines informing the study. The following are the 10 guidelines which are listed as a part of guidelines to evaluate an interface for its usability.

- Visibility of system status.
- Match between system and real world.
- User control and freedom.
- Consistency and standard.
- Error prevention.
- Recognition rather than recall.
- Flexibility and efficiency of use.
- Aesthetic and minimalistic design.
- Help users recognize, diagnose, and recover from errors.
- Help and documentation.

Having these heuristic guidelines thorough analysis of hotel search of various online travel websites made us conclude 10 guidelines which could be used specifically for the hotel booking section for cleartrip's hotel result page. The list is as follows:

1. Availability and ease of usage of map function to aid the hotel selection process.
2. Interactivity between the user and the entire system (system being the website here).
3. The negative effect of redundant and unnecessary functions/features.
4. The effect of filters on the final search results.
5. Effective usage of secondary search/modify search.
6. Effective error handling by the website.

7. Usage of the symbols and metaphors on the search result page.
8. Consistency in the information presented on the search result page.
9. Aesthetics in terms of font and color scheme used on the website.
10. The standardization of the website in terms of the international standards followed. For example use of IATA codes to search for cities.

Evaluation Strategy Summary

Some of the evaluation techniques used included observation of the participants while they were performing the tasks and making a note of some observable problems they were facing in the completion of tasks. Pre and post usability study were also used to aid the process of evaluation.

Data analysis Methods and selection rationales

Our study was mainly conducted keeping qualitative evaluations as a priority rather than quantitative ones. Qualitative parameters included behavior, response to questionnaire (survey), nature of problem faced while performing the tasks. This helped us to measure how the participants were thinking and how their thinking and how the tasks changed their behavior while completing the tasks. Rationale for inclination of the report more on the qualitative rather than quantitative aspects has been given in the test set up section (Testing scenario page 4) previously.

A usability problem can be identified with the help of usability study like the one being performed for cleartrip.com hotel section. These usability problems could have several level of severity when it comes to their impact on the end user. These levels of severity can be classified as below:

1. Low levels problem and therefore no impact on end user.
2. Cosmetic problem which may have a minimal impact on the end user.
3. Minor usability problem which is a hindrance & thus impact the end user negatively.
4. Major usability problem which needs be addressed as possible.
5. Usability catastrophe, user may not be able to use the system without resolution.

Some of the factors which will help us to classify a usability problem in the above categories include frequency, impact and persistence of the problem. These parameters have been used in relative terms in this report i.e. the problem with highest frequency has set the standard for a highest level of severity followed by the other levels according to relative frequency of occurrence. However some of the problems have also been evaluated considering the time taken by the participant to complete the task and any specific behavioral change.

Summary of results and data analysis

Pre-usability test summary

This survey helped us to determine the user profile and thus classify the results according to specific user profile. This was further divided into the following 5 sections:

- Computer usage (3 questions).
- Internet usage (1 question).
- Travel (2 questions).
- Travel booking process (1 question).
- Demographic information (1 question).

The survey results revealed the users to be extensive computer and internet users. Having booked travel plans using travel websites and travel agencies. The results have previously been reflected in the user profile summary section.

Usability study summary

Some of the usability problems were detected however none of the problems were in the category of usability catastrophe.

Post usability study survey summary

This survey(appendix 1) evaluated the users after the usability study and helped them translate various aspects related to their experience of using the hotel section of cleartrip website. The survey had 9 questions and the participants were not negative in their response towards their experience of usage of cleartrip hotel section. Considering all the participants were first time users of cleartrip website it was understandable for users neither to have highly appreciative remarks nor a very negative remarks for their experience of usage.

Interview

A short interview was conducted at the end of every usability study to know about the user's reaction to specific problems encountered during the usability study Usability study. Participants also suggested some of the users they would have desired for the hotel search section to have.

6. Results (problems):

Severity levels of problems:

The following are the list of the problems faced by the participants along with the severity of the problems.

P1: Error message

2 participants had the problem. 1 from young and 1 from young senior group. **Minor usability problem.**

P2: Redundancy of the information/features

3 participants had the problem 1 from young senior group and 2 from young user group. **Minor usability problem.**

P3: Filters usage problem and choppy implementation

5 participants had the problem. **Minor/Major usability problem.**

P4: Map usage

4 participants had the problem 1 from young senior group, 1 from senior and 2 from young group. **Major usability problem.**

P5: Travel rating confusing

5 participants had the problem. **Major usability problem.**

Description:

The problems are described in detail here along with the screenshots wherever necessary. A rationale for the level of severity for the usability problem has also been provided in this section. The redesign recommendations will talk about the ways in which this issue could be addressed in the next section.

P1: Error message

Oops, none of the hotels in London match your filter criteria.

Adjust the filters to the left to make them less restrictive. You could start over by clicking [Show all](#) tow

Alternately you can call us +91 22 40554999 (STD / local charges apply) between 7 am and 10 pm In

Parameter and guideline reference:

- Effective error handling by the website.

This problem reflects the error handling capability of the cleartrip hotel search section. Some of the steps in the scenario 1 and 2 were assigned names with wrong spelling to see the effectiveness of the error message for example name Bombay assigned instead of Mumbai and the hotel name to houslow instead of hounslow. 2 participants expressed frustration at the error message as they felt they would have to do the entire search again.

One of them was from young senior group and other was from young group. One of them can be quoted saying

“Do I have to do the entire thing again?”

This can be translated as a sign of frustrated user who could leave the website since the error handling message was suggesting to show all the results or do the entire search or call the help desk at the company. This problem has been referred to as minor usability problem because the frequency of occurrence was not very prominent. However the reaction of the participants who had this problem are something which should be of concern as a customer could be driven away from the cleartrip website if they don't find the sufficient help from the error message. It was also interesting to consider that the participants who faced such a problem had used travel booking website in the past and found this problem common to every website. One of the participant expressed that the message had a better language than a simple error message but it still did not solve the purpose of helping them to get the right thing and rather suggested some of the obvious things which were not were apparently a time waste and not desirable for the user. This can be interpreted to the everyday user of cleartrip website as well since a person may not find the time to call the call centre of the company and spend more time asking for the questions and thus would either leave the website or will come back to the website later with the relevant information which is required to get the right results. Since there is a possibility of a user coming back to the website or feeding the right information again this has been categorized as minor usability problems in terms of severity.

P2: Redundancy of the information/features

Parameter and guideline reference:

- The negative effect of redundant and unnecessary functions/features.
- Consistency in the information presented on the search result page.

Another problem which was of the minor usability problem severity was related to the redundancy of the information and the features on the result section of the website. Some of the redundant features are listed below:

- The multiple map present on the website (beside the list, below the star rating)
- Details (can be from clicking on the hotel name or clicking detail at bottom, clicking the traveler rating)
- Reviews multiple access points.

Such multiple routes to the same information were confusing for the participants as the user were not sure which was of the information was reliable. One of the user commented:

“Is this the same map as above?”

And

“What is the difference between those overview details and the ones by clicking on hotel name?”

This was an effect felt as a result of redundancy of the same features on the website. During the study a company official (Varun Khanduja in this case) is present to explain the difference in the two features which look almost similar. However the company official is replaced by the customer support on cleartrip website and there is a good possibility that the user may be driven from the website for the lack of trust on the features. However this may not be a major problem with all the users and therefore we decided to assign a minor level of usability severity to this problem. It is important to realize that such redundant information leads to a sense of distrust between the end user of the website and the company (cleartrip) in this case. This however is not felt to be a major problem as users could take time to understand every feature and thus make the booking accordingly. It is uncertain though if a user would find time enough to understand every possible feature and work most efficiently on the website.

P3: Filters usage problem

Parameter and guideline reference:

- The effect of filters on the final search results.
- Interactivity between the user and the entire system (system being the website here).
- Consistency in the information presented on the search result page.
- Aesthetics in terms of font and color scheme used on the website.

The filters present on the left side of the search results were not prominent for some of the participants. This problem was encountered by all the participants. Despite being encountered by all the participants this was not considered for the severity level of a major usability problem as the users were asked to use the filter feature multiple times during the entire usability study, another point which can be given to make this problem on the borderline of the major usability problem is the choppy implementation of the filter option along the filter section which has been discussed later in this section. Some of the steps like selection of the price range and the star of the hotel could have been done very efficiently by the user but it was observed that 2 of 5 participants (2 from young) did not use the filters instead they ended up checking the hotel details or sorting the hotels by the sort by feature present on the website. Two of the 5 participants (1 from senior and 1 from young senior) ended up clicking repeatedly on the average price name present on the filter and did not understand why the slider or the hotel name option in the filter disappeared. Such features are very important for the user to get their desired end result satisfactorily but the minor glitches lead to a frustration amongst the customers who may be the first time users of the cleartrip website. One of the participants also could find the

number of filters too much and did not understand the reason for many filters on the result page. A comment from the participant could be summarized as follows:

“Not sure why someone would need the hotel filter like the way it is here”

Another problem which has been referred to as choppy implementation means the participants found that while scrolling down the entire list of hotels in a single result page. The filter options kept dragging along while the users were scrolling down and they were giving a choppy look while being dragged down which made some of the users firstly wonder if there was something wrong with their graphics card however later it was realized that it was a problem with the cleartrip website itself. One of the user commented:

“This looks quite ugly when the filter options keep coming along in a shabby manner”

P4: Map usage

Parameter and guideline reference:

- Availability and ease of usage of map function to aid the hotel selection process.
- Usage of the symbols and metaphors on the search result page.
- Consistency in the information presented on the search result page.
- The negative effect of redundant and unnecessary functions/features.

The map function could be a very useful tool in the hotel selection process and could help a customer make a well-informed decision regarding their hotel booking option. The map feature in the hotel section of cleartrip website is plagued with the problem such as redundancy as discussed previously and navigation difficulty. There were steps specifically assigned for the user to make use of the map feature for example the one of the step required participant to look for a hotel in the nearby area or locate a bus station or train station near to the hotel. The users instead were found using the overview details and or checking the location of the hotel below the name of the hotel. 2 users were not able to identify the map feature at all and later had to be prompted to use the map feature for efficient navigation on the website. These two participants were from young senior and senior group. Rest of the participants could locate and use the map feature but found the usage of the map very difficult. It was found that users were facing problems in g to get the hotel being searched in the centre of the map to check the locality and also had problem using the zoom in and zoom out feature on the map. One of the participants commented:

“I hope the Google maps are easier to understand and had a better navigation option”

The user also felt that the number assignment on the map was confusing and the user had to retain the number of the hotel in their memory and get the same number on the map. This could mean that the search results are proving to be mentally strenuous for the user

and therefore user may find the experience frustrating in case they get the wrong numbers which was the case when some of the users were asked to use the map to locate the nearby hotel. This problem has been classified to be a major usability problem as all the participants had some or the other problem with the map function of the website.

P5: Travel rating confusing



Parameter and guideline reference:

- Consistency in the information presented on the search result page.
- Aesthetics in terms of font and color scheme used on the website.
- The negative effect of redundant and unnecessary functions/features.

The travel rating, trip advisor rating and the star of the hotel were some information which the user's found almost the same and thus were very confused while doing the steps related to finding the percentage based on trip advisor rating or finding traveler rating. Being a part of task 1 of scenario 1 users were asked to give the traveler rating and none of the users progressed without asking a question about the difference between the traveler rating and star of the hotel. One of the users even left the task as they did not think it was any different. One user belonging to the young group found the owl sign along with the trip advisor rating to be very confusing and did not see how this could be associated with the traveler rating. A comment was as follows:

“How do I find if these traveler ratings are positive and negative, like in Travelocity it is apparent that the smiley's are positive signs”

Although this feature may not be used by a customer all the times while booking a hotel as the star of the hotel may be enough for a person to book information. But as suggested by the study the confusion could lead to loss of confidence of a customer on a website and thus a customer may have second thoughts about the booking process. Also the percentage given as a result of traveler reviews which is a part of trip advisor rating was not completed as a step by any of the participants and they always confused it with the traveler rating given in the initial page of the result section. Therefore keeping the frequency and the impact of the feature on the booking process it has been classified into the majority usability problem category.

7. Recommendations:

R1: Error message handling

Making the error message more helpful for the users. For example instead of having the show all or going to search again the closest search could be suggested which could probably be one user has been looking for. Although the hotel search page gives just the option of feeding the right city instead of feeding the date or other details but a suggesting system would have been useful. A suggesting system can also be used in case user doesn't find any hotel with their filter option by suggesting the ones closest to the filter options for example if a 5 star is booked for a night at Taj suggesting a 4 star hotel with same filter options in the same locality may increase the interest of a user. Thus keeping the interactivity between the user and the system running is very important for a pleasurable experience for a customer.

R2: Removal of redundancy

Redundancy can be reduced by having a single feature and then keeping several functions as a part of the same function. For example keeping one map option on the page and using the map option for multiple usages according to the need of the user could be useful and avoid any confusion amongst the end user. In case it is important to keep many options of the same function as they are superficially different one should make sure that the metaphor used for the option is related to the usage of that modified feature. For example map when used at the side bar of the list option and then below the hotel name should be assigned different metaphors. Same is the case with too much of the price being shown on the first page itself. An attempt can be made to give one single price rather than showing number of other prices on the first page itself. Redundancy removal is important as it could violate principles of minimalistic and simple design which are the core principles of cleartrip's website. Also this would reflect lack of consistency on the website. Some other features which may be quite unique like distance calculator can be incorporated which may be improvement over the present distance filter.

R3: Usage of filters

The filters of the website could be made more prominent by firstly reducing the number of filters used on the website. It was observed that the filter by the name hotel name was very long and most of the users would not feel the need of the feature. Also incorporation of other filters like famous hotspot/tourist attraction distance could help to increase interest of a customer on the website. Another problem of the filter as mentioned earlier is the choppy implementation of the left side bar while scrolling the page. This has been felt to be very important and after speaking to a fellow friend who is a software developer at Microsoft it was told that it is just a matter of bad implementation of code/or some other programming problem. Another problem which could be addressed is the improvement in the minimizing of a filter option. As it was felt that once an option was hidden it was not intuitive for some of the participants that they had to click on it back to activate the filter.

R4: Map functionality

As mentioned previously the map functionality can be made less redundant and if it has to be there a separate metaphor should be assigned in order to make it clear to the user the difference between the two maps. Another feature which could be helpful is to have a reference point on the map according to user choice and then showing distance between the reference points in the city to the point user wants to go. A dotted highlight on the map can also help the user to identify the ideal path to reach the destination. The reference point can be given by the user or could be a dropdown menu with the list of options. The place to be found could also be used by the user. Proper symbols if used on the map could also help users to remember cleartrip hotel booking as a website which gives comprehensive information related to the location of the hotel. The zooming features could be replaced with simple zoom in zoom out icons which are much easier to use than the present form of Google maps. The map could be improved a lot if it was made more interactive with the help of above features as we are increasing the interaction of systems with the user.

R5: Travel ratings

As mentioned about the redundancy earlier we should try to minimize the multiple usages of traveler ratings on the result section. As it tends to confuse the user. However the star ratings of the hotel could be kept and one of the traveler ratings could be incorporated on the detailed page. The icons related to the traveler rating can also be worked on as it was not intuitive to the participants if the icons were positive or negative remarks despite the presence of green color the user wanted to be sure that the information pertaining to the traveler rating was good as users are usually not aware of what traveler rating means and when they are spending money on a website they would like to be sure enough about the facilities they would get from their money spent.

8. Conclusion and future work

The report suggests 5 usability problems which were felt to be the most important ones from the study conducted. A discussion with fellow designers can help to reveal more problems with the interface. An alternative to finding statistically more number of usability problems can be related to future work of doing more usability studies. These usability studies can concentrate on getting concentrated on specific user profiles. A usability study can also be performed after the implementation of the above recommendations to see the effect of the implementation. It was also felt that users were indifferent to the location of select price at the present location in the booking process, this However could be subject to future study to infer some insights about the location of selecting the room at the result page available presently.

Acknowledgement

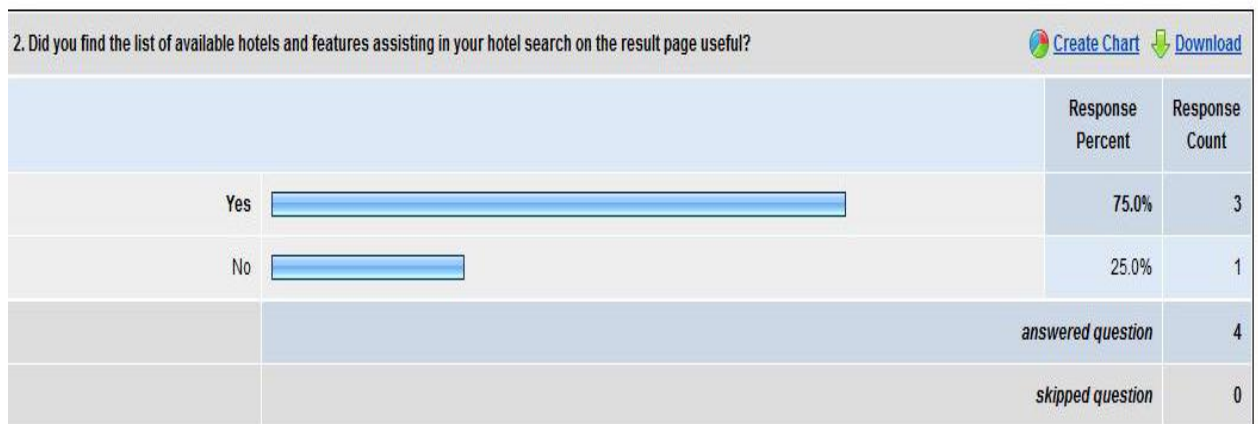
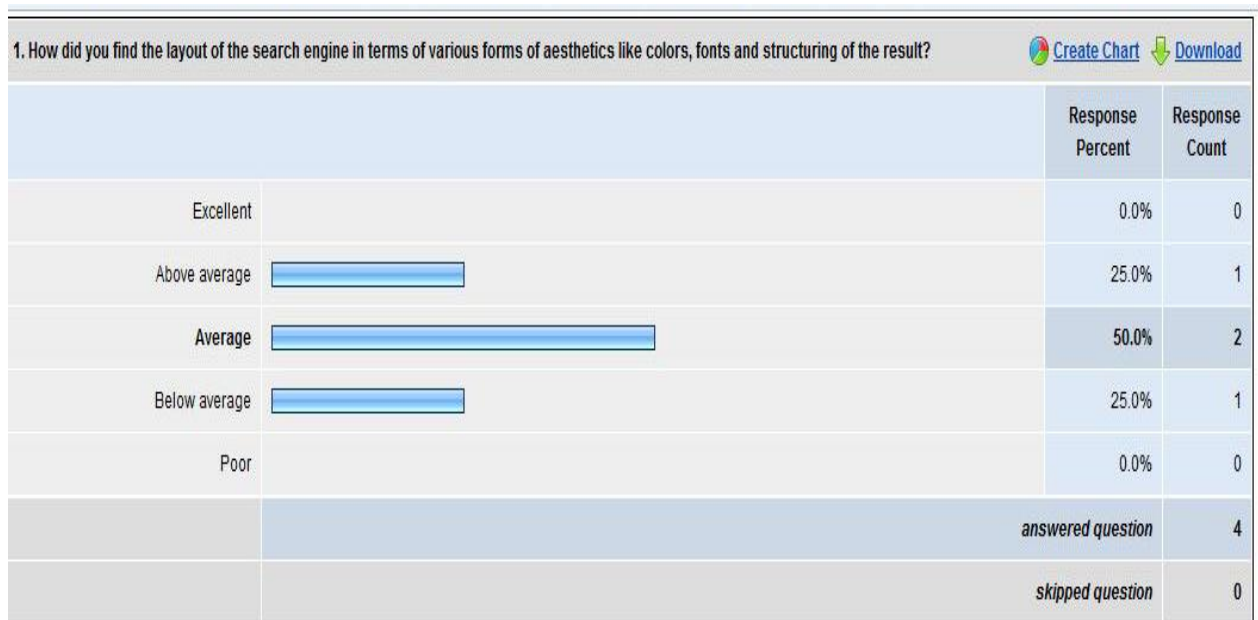
I would like to thank all the participants who agreed to give their valuable time and cooperation in order to make this report. This report wouldn't have been in the present form without the help and cooperation of Mr Varun Gupta at cleartrip.

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1. Nielsen, Jakob. Heuristic Evaluation. <http://www.useit.com/papers/heuristic/>
2. Nielsen, Jakob and Loranger, Hoa. Prioritizing Web Usability. New Riders Press, Berkeley CA.

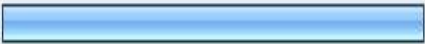

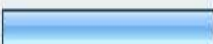
Appendix 1

Post usability study results





3. Did you find it easy to navigate on the search results page?

[Create Chart](#) [Download](#)

		Response Percent	Response Count
Yes		50.0%	2
No		25.0%	1
Somewhat		25.0%	1
<i>answered question</i>			4
<i>skipped question</i>			0

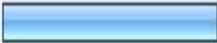


4. Did you have to remember any information related to the hotel search when you were searching for a hotel?

[Create Chart](#) [Download](#)

		Response Percent	Response Count
Yes		75.0%	3
No		25.0%	1
Maybe		0.0%	0
<i>answered question</i>			4
<i>skipped question</i>			0




5. Would you feel the need to call the help desk, e-mail or call center of cleartrip.com if you would have gone through the entire booking process?

[Create Chart](#) [Download](#)

		Response Percent	Response Count
Yes		25.0%	1
No		25.0%	1
Maybe after booking process.		50.0%	2
		<i>answered question</i>	4
		<i>skipped question</i>	0



6. Were the language and symbol used on the website hard to understand?

[Create Chart](#) [Download](#)

		Response Percent	Response Count
Yes		25.0%	1
No		50.0%	2
Some of them		25.0%	1
		<i>answered question</i>	4
		<i>skipped question</i>	0




7. How relevant was the information on the website to a hotel booking for you ?





[Create Chart](#) [Download](#)

		Response Percent	Response Count
Very relevant		50.0%	2
somewhat relevant		50.0%	2
Not at all relevant		0.0%	0
<i>answered question</i>			4
<i>skipped question</i>			0

8. How was your overall satisfaction while using the website?

[Create Chart](#) [Download](#)

		Response Percent	Response Count
Excellent		0.0%	0
above average		25.0%	1
average		50.0%	2
below average		25.0%	1
poor		0.0%	0
<i>answered question</i>			4

9. Do you have any positive or negative comments about the website?		 Download
		Response Count
 Hide replies		2
<div style="display: flex; justify-content: space-between;"> <div> <p>1. Please make a clearer distinction between user ratings and hotel rankings.</p> <p>Please make sure that the user can easily recover from a mistake (e.g. incorrect spelling) by providing useful error message or by providing required information (e.g. assistance with spelling).</p> </div> <div style="text-align: right;"> <p>Sun, Jul 5, 2009 5:57 PM  Find..</p> </div> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <div> <p>2. lots of redundancy...to much information...not a natural flow of a traveler trying to book. think like a traveler.</p> </div> <div style="text-align: right;"> <p>Sat, Jul 4, 2009 10:55 AM  Find..</p> </div> </div>		
	<i>answered question</i>	2
	<i>skipped question</i>	2