

Usability Evaluation Scenario


In preparation for a major revision of the hotel reservation website www.Hotelpenn.com for the Pennsylvania Hotel in New York City, iHotelier wants your assessment of the usability of the current website for typical users, in particular the OneScreen reservation.

We (iHotelier) are a leading supplier of one-page Flash-based hotel room reservation systems. We want our customers' websites to have a leading position on the World Wide Web.

Below is a list of user tasks that our Marketing and Project team have identified as benefiting from user feedback. The tasks are listed in order of importance to Marketing with the most important tasks listed first.

1. Find out what it costs to rent a room for a specific period and whether suitable rooms are available.
2. Make a reservation.
3. Cancel a reservation.

Feedback from our clients indicate that there might be usability problems in the following areas:

1. Reserving a room with a special request, such as a non-smoking room.
2. Understanding the different types of color coded date boxes, . For example, do users understand the check-out only date boxes?

Hotels implement a lot of strange rules, like minimum stays, closed to arrival, closed to departure, etc. These have become challenging to “explain” to the user graphically, and we are still working on how to make this more efficient and clear without forcing the user to learn about the hotel business. We want to find a way to help the user overcome these restrictions, without even knowing it.

3. Entering name, address and credit card information.
4. Understanding the ability to proceed in any order, that is, to fill out the three reservation columns in any order.

Does it result in more reservations? Do users figure this out quickly, or not at all? Our experience is that most users will not notice this, but some do read and figure it out after clicking around a bit and getting a feel for the behavior.

One situation where this feature is particularly beneficial is when there is little availability. With the HTML, linear approach, users enter dates and people, click search, and get, “Sorry nothing available. Try again.” This can be an endless loop as the user tries to blindly guess dates that are open. With OneScreen, the user can start by selecting a room which then shows availability for that room on the calendar. The user can then select dates around what is blocked out, assuming their schedule is flexible.

So a task might be to have the user make a reservation for, say, 3 days and a certain type of room that we know is almost completely sold out on a given month. See if the user figures this out, and if so how long does it take.

Usability Evaluation Scenario for Comparative Expert Review Workshop (CUE-4)

We want you to focus on the areas outlined above, and less on other services now offered from the website. We are less interested in the following areas:

1. The HTML reservation system.
2. Conferences and Meetings.
3. Travel Agent pages.
4. Group Reservations.
5. Local area information; Tourist information.

User profile: Adult travelers who have web access. Users will have flash installed and will probably have a reasonably fast (non-modem) internet connection (otherwise they will be redirected to the html version of the reservation system), so they are probably not complete novices on the web. This is definitely for an international audience. About half of the bookings for the site come from Europe.

Competition includes other sales channels, like call center, travel agent, wholesalers (packaged vacations), etc. Other hotels and other booking engines are competition, too. For example we want a visitor to Orlando to book at one of our two dozen or so hotels there, and we hope that - given that price is nearly equal - the ease with which a reservation is made would generate some loyalty to the hotel. The way we look at it is that the hotel guest's experience begins when they make the reservation online and continues through check-out. Since many competing booking engines have many steps (some take more than 20 steps!), we would expect OneScreen to give our hotels some advantage.

Practical Information

The Hotelpenn.com site is fully operational. Reservations are real and should be made with care. Leaving a bunch of test reservations in the system may prevent a real reservation.

- Please cancel any reservations that you make within two hours.
- Make reservations only for dates that are at least one month after the current date.
- Enter the word "TEST" as the first word in the Comments field.
- Use test credit card number [deleted] with any expiration date.

Inventory status as per mid-February:

- The hotel is completely sold out in the periods July 3-5 and September 9-10, 2003
- They are sold out of Superior Junior Suites May 17 to May 20, 2003. They only have one Superior Junior Suite in their inventory so this may happen from time to time.

iHotelier expects their reservation system to work on any browser that has Flash 6 installed. They detect the presence of the appropriate Flash version and redirect the user to an html version of the reservation system if it is not installed (rather than offer to download and install Flash). Since the product team is not focused on evaluating the html version of the site for this test, you should make sure that Flash 6 is already installed on whatever browsers you provide for participants.

Evolution of OneScreen

By Jim Whitney.

Webvertising was founded in March of 1994, and focused on high-end web solutions. Initially that meant comprehensive web sites, and later web applications. Webvertising entered the hotel market in about 1995 with a web development project for a group of South Carolina resorts. The web site featured an email request form for “online reservations,” and despite the extreme lack of efficiency of the back-and-forth conversations between hotel and guest, it was very successful. So successful that the hotel was being overwhelmed.

In 1996-97, we launched a database-driven application, written in ColdFusion, that allowed the hotel to manage rates and inventory by date via a password-protected admin site. Reservations were also received into this admin application. On the public side, a six or seven-step reservation process allowed users to enter dates, check availability against that entered by the hotel in the admin, enter billing info and complete a confirmed reservation. This was so successful that it generated more than \$1 million the first year, and more than \$2 million the second.

During that second year, Webvertising added another hotel client when an existing client, a tourist attraction in Galveston, opened a resort and conference hotel. A similar application was developed for this client. They received their first reservation 15 minutes after going live, and recouped the initial investment in less than 30 days.

Based on these two successes, Webvertising devoted internal resources to develop a system that could serve many hotels, via an ASP model. In 1999, iHotelier was launched as a product and suite of ancillary services, operating as a division of Webvertising. Hotels paid a nominal set-up fee, and then a percentage of online reservations made through iHotelier.

The commission-based fee structure was important in the development of OneScreen, because it gave Webvertising the incentive to increase reservations. In addition to marketing activities, we took a hard look at the booking process, trying to find ways to improve the conversion rate. The Admin side of iHotelier included a report that showed how many people left the 5-step process without completing a reservation, and at which step. For most hotels, the conversion rate was between 3% and 5%. We assumed that at least some of these people were dropping out because the process was too long, and that if we could streamline it, more reservations would be made. For some hotels, even just a small increase in conversion rate can bring significant revenue.

In 4Q 2000, we started talking about Flash as a tool for building a better UI. Flash at the time was at version 5. In March 2001, I began learning Flash and building elements of a possible UI in my spare time. I was primarily concerned with building a calendar that could take user input for check-in and check-out dates. As this effort progressed, it became apparent that we could perhaps fit the entire process into a single screen. In May 2001, we demonstrated a prototype to the Broadmoor, and asked if they would be our first OneScreen user. They agreed, provided some feedback, and in mid-August 2001, Broadmoor went live; within a day they received their first reservation. About two weeks later was September 11.

At the time, iHotelier had about 50 hotel clients and 1 OneScreen user. We now have close to 800 hotels around the world, and about 200 OneScreen users. Over \$2 million has been booked through OneScreen.

Deliverables

We expect the following deliverables from each team:

- An evaluation report
- An addendum

Your deliverables must be submitted to [e-mail address deleted] not later than the date specified in the email accompanying this scenario. You have fourteen days to complete a usability test and seven days to complete an expert evaluation.

Deliverables must be written in English.

Your deliverables must be anonymous. Please make sure that your name and affiliation does not appear anywhere in your reports. Check the properties of your submitted reports carefully; sometimes Word hides author information there.

Each evaluation team has a code letter assigned. The code letter should appear in the header of each page.

The following report formats are accepted:

- Microsoft Word.
- Star Office.
- RTF.

If you have problems meeting any of these requirements, please contact [e-mail address deleted] immediately and we'll find a solution.

Evaluation Report

Your evaluation report must contain:

a. Title page with team designation.

b. Executive Summary.

- The five most important positive findings in priority order with the most important listed first.
- The five most important usability problems in priority order with the most important listed first.
- Up to three high-level managerial recommendations.

Tip: Make sure the findings and problems summarized in the Executive Summary are described in the section "Comments on the website."

c. Method.

A description of the usability evaluation procedure you have used. For a usability test, please also describe the test participant selection process and their profiles briefly.

d. Comments On the Website.

We are trying to balance realism of format with something that makes data analysis for the workshop easier to do. For that reason, we ask that all problems/comments be entered into a table, in the following way:

- Use the table format shown below.
- Number your comments consecutively, starting from X-01, where you should replace “X” with your team’s code letter. Please do not use auto numbering, since auto numbering often does not survive a format conversion.
- Classify each comment. Use the categories below.
- Start the comment description with a one-line header that briefly describes the comment.
- Continue with a description of the usability comment.
- Provide a short description of how the usability problem could be solved. This description is required only if the comment is about a usability problem, and only if you’re reasonably sure that your suggested solution would actually make the interface more usable.
- Report one usability problem or one positive feature per comment. Split comments that are conglomerates of several problems or positive features.
- Include as many comments as you would consider appropriate in an industrial setting but do not exceed 50 comments. If you feel that more than 50 comments are required, please report the 50 most important comments and include a note in the addendum.

e. Appendix: Test script.

Include your test script, in particular the usability test tasks you used. If you used open ended tasks please describe briefly what each test participant decided to go for. This appendix is required only if you do a usability test.

We have provided a report template with examples at the end of this document.

Each usability comment must be classified in one of the following categories:

- *Positive finding.*
This approach is recommendable and should be preserved.
Category code C
- *Minor problem.*
Caused test participants to hesitate for a few seconds.
Category code P.
- *Serious problem.*
Delayed test participants in their use of the website for 1 to 5 minutes, but eventually they were able to continue. Caused occasional “catastrophes”.
Category code Q.
- *Critical problem.*
Caused frequent catastrophes. A catastrophe is a situation where the website “wins” over the test participant, i.e. a situation where the test participant cannot solve a reasonable task or where the website annoys the test participant considerably.
Category code R

Usability Evaluation Scenario for Comparative Expert Review Workshop (CUE-4)

- *Good idea.*
A suggestion from a test participant that could lead to a significant improvement of the user experience.
Category code A.
- *Bug.*
The website works in a way that's clearly not in accordance with the design specification. This includes spelling errors, dead links, scripting errors, etc.
Category code T.

If you are doing an expert evaluation, the above category descriptions should be modified accordingly, for example "*Serious problem.* May delay a considerable number of users in their use of the website for 1 to 5 minutes, but eventually they will be able to continue. May cause occasional "catastrophes"."

Use the following table format for reporting usability comments:

ID	Category	Description
X-01		

Optional information in the report:

- Table of contents
- Theoretical background for methodology
- Equipment used
- Screenshots
- Time measurements.

Addendum

In addition to the evaluation report, please submit a separate addendum with the following information:

a. Resources used for the evaluation (person hours).

Provide a day-by-day timesheet for the period where you carried out your evaluation. Include information about resources spent by all team members and colleagues. Do not include information about test participant resources, if you're doing a usability test.

b. Comments on how realistic the evaluation has been compared to the professional evaluations you normally carry out.

c. Other comments (if applicable).

There are no specific formatting requirements for this report except that your team code letter should appear in the header of each page. The addendum must be anonymous, just like the evaluation report.

Video Tapes (Optional)

For those of you who run a usability test and who are planning to capture the participants on video tape, we would love to be able to use these videotapes for educational purposes. If you are willing to contribute your video tapes to a website where students can use them to view professionally run usability studies and to assess participant sessions for usability findings, please do the following:

- Do not capture the participant's face. Just the screen, their voice and the evaluator's voice.
- Have a consent form that requests that the participant allows this video tape to be made available to students (probably via a password protected web site). Test participants will not be identified on the video tape. Tell them that
 - a) this is completely voluntary,
 - b) they can make the decision after the session is over.
- Make sure you get the filled out consent form. If you want help creating such a form, please contact us immediately.
- Get us the results, with associated consent form, as video tapes or in a digital format. You can bring video tape copies to the workshop. Try to make them first generation copies, if at all possible. If you give us the originals, we can return them to you, if you like.

Support

Please direct any questions that you might have about this scenario or for iHotelier's Marketing department and Project team or for the hotel management to Rolf Molich. Telephone conversations or personal meetings with iHotelier staff are not possible.

The workshop organizers are willing to screen your usability test tasks. We are also willing to coordinate task sets between several teams who do usability testing. It would be interesting to compare results from teams who had used the same tasks. This offer is particularly important if you are interested in making videos that could have a potentially large student audience; it would be unfortunate if the test tasks didn't accurately reflect the evaluation requirements.

Have fun!

- and please don't hesitate to contact us if you run into problems.

Robin Jeffries and Rolf Molich

[e-mail addresses deleted]

Usability Evaluation of www.Hotelpenn.com

March 2003

Written by Team X

Executive Summary

This report documents the findings of a usability evaluation of the website www.Hotelpenn.com carried out as part of the CHI 2003 Workshop on Comparative Expert Reviews in March 2003 by Team X. The study is also known as Comparative Usability Evaluation 4 (CUE-4).

The most important positive aspects about the website:

1. **Checkout process.** The checkout process is smooth and convenient.
2. [Four additional positive aspects in priority order with the most important ones listed first.]

The most important improvement areas for the website:

1. **Quality assurance.** Links to non-existing pages and scripting errors occurred often. These technical problems prevented users from making a reservation, even though rooms were available at the hotel. Quality assurance is important because such problems break down customers' trust in the website.
2. [Four additional improvement areas in priority order with the most important ones listed first.]

Based on the usability problems identified in this evaluation, our team recommends that the website project team should

1. Allocate more resources to quality assurance.
2. [Up to two additional managerial recommendations.]

Method

[A description of the usability evaluation procedure you have used. For a usability test, please also describe the test participant selection process and their profiles briefly.]

Comments on the Website

Usability comments are classified in one of the following categories:

- *Positive finding.*
This approach is recommendable and should be preserved.
Category code C
- *Minor problem.*
Caused test participants to hesitate for a few seconds.
Category code P.
- *Serious problem.*
Delayed test participants in their use of the website for 1 to 5 minutes, but eventually they were able to continue. Caused occasional “catastrophes”.
Category code Q.
- *Critical problem.*
Caused frequent catastrophes. A catastrophe is a situation where the website “wins” over the test participant, i.e. a situation where the test participant cannot solve a reasonable task or where the website annoys the test participant considerably.
Category code R
- *Good idea.*
A suggestion from a test participant that could lead to a significant improvement of the user experience.
Category code A.
- *Bug.*
The website works in a way that’s clearly not in accordance with the design specification. This includes spelling errors, dead links, scripting errors, etc.
Category code T.

[The following usability comments serve only as examples. They may or may not describe relevant usability comments for the website.]

ID	Category	Description
X-01	C	Useful information. Test participants appreciated the pictures of the interiors of the rooms.
X-02	P	Speak the users’ language. Some test participants did not know what an ”asterisk” was (in ”fields with an asterisk are required”) Facilitator’s suggestion: Replace with ”fields marked with a * are required”

Comparative Expert Review, March 2003 (CUE-4) - Team X

X-03	R	Visibility, affordance. Most test participants did not understand that they could start by selecting a room type and thus get an overview of the dates when rooms of that type were available. Most test participants thought that they had to start by entering information in column 1, then fill out column 2, etc.
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