

Usability Test Report of CP's Website (Proposal)

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Common Industry Format for Usability Test Report v1.1

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Executive Summary

vthe identity and a description of the product
va summary of the method(s) of the test including the number of and type of participants and their tasks.
vresults expressed as mean scores or other suitable measure of central tendency
w the reason for and nature of the test
w tabular summary of performance results.

1 Introduction

1.1 Product Description

CP.pt is the official website of emphCP - Comboios de Portugal, E.P.E, the public portuguese company responsible for rendering national and international passenger rail services.

CP customers vary according to the service provided. Many college students, workers and pensioners use the regional and urban services for small and medium distances. Long distance services are more used by college students that are away from home, tourists, and executive workers. Unfortunately, no official document stating the segmentation of the CP.pt website's users was found.

It is noticeable that CP services have a lot more passengers during school time, which means that students are an important segment of CP's customers. Besides, most of the students have good experience with the WEB, so the CP.pt website is expected to be a great tool to them. Therefore, this usability evaluation will focus in the segment of college students, which might be portuguese citizens as well as foreigners that study or want to study in Portugal and are able to speak English.

Many scenarios can apply for the use of the website by students. Some times they leave the classes earlier and need a way of quickly check if there are other alternative trains that can take them home earlier. Also sometimes there is no direct train to their destination, so they have to catch another in the middle of the travelling. Another scenario is when the weekend is over and the student has to buy his/her ticket from home to his/her university city. Buying it from the website is more convenient since the student can avoid wasting time in the ticket lines and can grant a seat for his/her trip.

From the features implemented in the website, the following were tested:

- Choose between Portuguese or English versions
- Check timetables for a trip.
- Buy fast train tickets, being the features that were tested.

1.2 Test Objectives

vThis section describes all of the objectives for the test and any areas of specific interest. Possible objectives include testing user performance of work tasks and subjective satisfaction in using the product. This section should include:

- v The functions and components of the product with which the user directly and indirectly interacted in this test.

- w If the product component or functionality that was tested is a subset of the total product, explain the reason for focusing on the subset.

2 Method

The aim of the test was to validate the usability of the main features of the CP.pt — finding the most suitable train and buying tickets. It is important that these tasks are easy to learn. Representative users were asked to complete typical tasks, measures were taken of effectiveness, efficiency and satisfaction, and some notes about the users' opinion were taken in order to have ideas for some improvements that can be made.

2.1 Participants

This test had 2 participants. Both were college students with ages between 21 and 26 years old. They are intermediate level users, that frequently use WEB applications. They already have experience in other transportation company's websites.

Students are used to get things fast and with an attractive design. Usually they have a laptop with a 13 or 15 inches screen, and use the Eduroam network when studying in the university.

2.2 Context of Product Use in The Test

2.2.1 Tasks

The tasks that the participant has to accomplish are the following:

1. Select the English Version of the application.
2. Find the schedule for a trip from Braga to Aveiro.
3. Find a cheap trip from Braga to Aveiro.
4. Buy a ticket from Braga to Porto.

These tasks are described in more detail in the *Usability Test Plan*, available in the appendix ???. For each task, all the steps were defined in order to describe how the task can be efficiently accomplished.

These tasks were selected for being the features that are expected to be of the most important use. Every transportation website has these features and add great value to the customers, so it is important that they meet the users needs.

All the completion and performance criterias are also described in the Usability Test Plan (see appendix ??).

2.2.2 Test Facility

The test was made in a study room at the faculty. The moderator is sitting next to the participant in order to make the observation and query and give assistance. The screen and audio were recorded using the tool QuickTime Player 10.3 which is invisible to the user and does not affect the user experience.

2.2.3 Participant's Computing Environment

According to (?), the most common resolution used in WEB is 1366×768 . In this experiment a 13 inches RGB screen with approximately the same resolution was used: 1440×990 . For interaction with the application the participant used an Apple laptop keyboard, and an Apple Magic mouse. Some other devices were available if the user didn't feel comfortable with these devices, however, they were not used.

The browser Safari 7.0.1 with default settings was used with an internet connection which had an average download and upload speeds of 4Mbit/s and 1Mbit/s , respectively.

2.2.4 Test Administrator Tools

A *Data Logging Form* was designed providing the moderator with a tool to record some notes about each task of each participant. The form has some variables , and a generic questionnaire to be asked to the user. It also provides a space to take some notes while the moderator conducts a small post-task interview.

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pendix

define vari-
ables

All the task information is provided in the *Usability Test Plan*, available in the appendix ?? . Some script about how the moderator should conduct the experiment is provided. All the steps that are necessary to finish a task are clearly described as well as some guidelines with the important questions for the post-task interview.

After the test the participants were asked to answer a post-test questionnaire based on (?) .

appendix

As it was already mentioned, during the experiments, the screen and voice were recorded using the tool QuickTime Player 10.3.

2.3 Experimental Design

vDescribe the logical design of the test. Define independent variables and control variables. Briefly describe the measures for which data were recorded for each set of conditions.

2.3.1 Procedure

The participants were informed that the usability of CP's website was being tested, to find out whether it met the needs of users such as themselves. They were told that it was not a test of their abilities. They were asked to sign a consent form.

Participants were given introductory instructions. The evaluator reset the state of the computer before each task, and provided instructions for the next task. The participant could ask for assistance and make questions whenever they find necessary, in order clarify any part of the task. All assistances were logged by the moderator. Also there was no time limit for the task completions, but if the moderator feels that the participant is stuck in some part, he was allowed to give some hints if properly logged.

After each task the moderator conducted a small interview trying to answer some crucial questions.

The participants were non remunerated voluntaries and during each test session only the moderator and a participant were present.

2.3.2 Participant General Instructions

The instructions were given personally by the moderator to each participant. The test session proceeds by having only one user in the room with a moderator. Whenever the user needed help he/she could simply ask for help.

2.3.3 Participant Task Instructions

Before starting each task the moderator explained what it was expected to accomplish in the following task. The task instructions are very simple, being described in a short sentence, as stated in section 2.2.1.

2.4 Usability Metrics

vExplain what measures have been used for each category of usability metrics: effectiveness, efficiency and satisfaction. Conceptual descriptions and examples of the metrics are given below.

2.4.1 Effectiveness

For measuring effectiveness the following measures were considered:

Completion Rate the percentage of participants that correctly finished each task.

Unassisted Completion Rate the percentage of participants that correctly finished each task without assistance.

Number of Assistances The average of assurances given in each task.

Back Button hits The average of times the user hit the Back Button in the browser.

Errors The number of times a user had to repeat parts of the task.

2.4.2 Efficiency

Efficiency was accessed by measuring the following parameters:

Task time The average time the users took to correctly complete each task.

Completion rate efficiency mean completion rate/mean task time.

2.4.3 Satisfaction

Satisfaction is a subjective measure that correlates with the user's motivation to use a product. The standardized instrument *System Usability Scale* (SUS) provides a 10 item questionnaire with five-scale responses that can be converted into a score. After the test the users answered this questionnaire.

Also a post-test questionnaire based on was given to the participants (available in appendix ??). This questionnaire intended to provide some insights about the way the design should be changed to make it more suitable to the user.

reference
SUS

<http://www.>

3 Results

3.1 Data Analysis

3.1.1 Data Scoring

The method by which the data collected were scored should be described in sufficient detail to allow replication of the data scoring methods by another organization if the test is repeated. Particular items that should be addressed include the exclusion of outliers, categorization of error data, and criteria for scoring assisted or unassisted completion.

3.1.2 Data Reduction

The method by which the data were reduced should be described in sufficient detail to allow replication of the data reduction methods by another organization if the test is repeated. Particular items that should be addressed include how data were collapsed across tasks or task categories.

3.1.3 Statistical Analysis

3.2 Presentation of the Results

Effectiveness, Efficiency and Satisfaction results must always be reported

3.2.1 Performance Results

TABLE

References