*Special Issue – ENTER 2012 Idea Exchange*

# Usability evaluation of an eLearning course presenting a regional destination. The case of "Ticino Switzerland Travel Specialist".

Nadzeya Kalbaska
Angelina Jovic
Lorenzo Cantoni

webatelier.net,
Università della Svizzera italiana, Switzerland
{nadzeya.kalbaska ¦ angelina.jovic ¦ lorenzo.cantoni}@usi.ch

## Abstract

In recent years Destination Management Organizations (DMOs) have started to offer eLearning courses, which train travel agents and tour operators to promote better tourism destinations. eLearning courses increase marketing activities of a DMO also they meet the needs of travel agents, who are in search of new unique selling points in the threatening context of eTourism disintermediation. Nevertheless, the user-friendly appearance of these eLearning courses and their easiness of use are still a challenge within the tourism industry. This paper introduces such a course, offered by a Swiss regional DMO, and presents its evaluation through a usability testing. Based on such a procedure, found usability issues were marked, implemented, then course has been released in beta version.

**Keywords:** eTourism; eLearning; usability evaluation; instructional design.

## 1    Introduction

The competitiveness of tourism destinations depends largely on how information needs of stakeholders (being final consumers or intermediaries) can be satisfied through ICT - based infrastructures and services. In this process, the quality of online communication in terms of usability (content, navigation and transaction as well as overall usability) has been a fundamental issue in the field (Inversini & Cantoni, 2009). Careful design and usability evaluation practices are crucial not only for general B2C websites, but also for B2B sites and online tourism educational resources.

Nowadays, DMOs use new technologies not just to spread marketing messages to all the partners and industries involved in the production and delivery of the tourist activity/product, but also to offer a full learning experience (eLearning) about the destination and its attractions, so that professionals can better serve their clients/tourists when presenting a given destination. eLearning programs offered by DMOs are designed to provide travel agents and distributors with the knowledge and skills to sell the destination more effectively and efficiently (Cantoni & Kalbaska, 2010).

The objective of this paper is to address one course, offered by a Swiss regional DMO and present its evaluation from a usability point of view. The methodology, which has been chosen, is user testing done by eight travel agents who have attended full online training experience, while speaking aloud their thoughts/feelings (cognitive walkthrough).

The structure of the paper is as follows: literature review with a special attention to the usability practices in eLearning field and "Think Aloud" usability method. Then the case study is introduced, followed by the methodology of the usability analysis and the results of the research.

*Special Issue – ENTER 2012 Idea Exchange*

## 2 Theoretical Framework

### 2.1 Usability evaluation of eLearning systems

The usability of eLearning systems is crucially important (Triacca et al., 2004; Ardito et al., 2004) as an effective eLearning system should include sophisticated and advanced functions, which yet should hide their complexity, providing an easy and flexible interaction suited to catch learners' interest. Usability evaluation is a crucial aspect that helps to undertake the quality assessment of any eLearning environment (Botturi et al., 2007). Though shaping usability represents an important condition for success of any eLearning projects.

### 2.2 "Think Aloud" usability method

"Think Aloud" technique allows user - testers to identify main usability problems. For the "Think Aloud" method users are asked to verbalize their thoughts and comment on their actions while they handle the application (Harms & Schweibenz, 2007). This "allows a very direct understanding of what parts of the dialogue cause the most problems" (Nielsen, 1994). During the test users are observed by the test conductor. The test conductor is taking notes and reminds test subject to "Think Aloud". Whole testing session is recorded, in order to be able to analyze again -- both the computer screen and the face of the tester. According to Harms & Schweibenz (2007) the big advantage of this method is the recordings, especially the screen cam files, which show cursor movements that help to identify problems in navigation and orientation. This is especially helpful when discussing the findings and suggestions for the redesign with the client.

## 3 The Case: Ticino Switzerland Travel Specialist eLearning Platform

Ticino Turismo is a regional DMO of canton Ticino in Switzerland. Its main responsibilities are marketing and promotion of the region using offline and online media. Grounded on the need of Ticino Turismo to coordinate its trade partners as well as to train them and deliver up-to-date, clear and catchy brand image of Ticino as a destination, the opportunity for the creation of an eLearning platform has emerged. The project "Ticino Switzerland Travel Specialist eLearning Platform" is based on the collaboration with the *webatelier.net*, research lab of the Università della Svizzera italiana (University of Lugano, Switzerland), whose expertise in eLearning was used in order to create an eLearning platform for personalized education of travel agents. The project started on November 2010, with the planned length of one year.

Main educational goal of "Ticino Switzerland Travel Specialist eLearning platform" is to train travel professionals, travel agents and tour operators, to sell Ticino as a destination and to provide them with Ticino Switzerland Travel Specialist certificate.

During the project realization following phases were conducted: analysis (needs, goals, benchmarking study of similar courses provided by different DMOs), design (information architecture and instructional design), development (alfa and beta version of the platform together with the usability testing), implementation (delivery of the course to travel agents) and evaluation (usages analysis). As part of the development phase, alfa version of the platform with all didactic materials and all functionalities enabled had been published. On the alfa version, usability evaluation had been conducted. Based on the findings of usability tests, alfa version was improved and beta version of the platform had been launched under the next web address: www.ticino.ch/e-learning.

Online training consists of 5 content modules: "Discover Ticino", "Selling tips and testimonials", "Culture and events", "Excursions and nature", "Rivers and lakes". In order to get a certificate, participants need to go through all training materials (read slides, watch videos and play interactive animations) and pass the final exam. All course materials were developed in English. Time needed to complete all studying and testing activities is about 90 minutes.

## 4    Usability Evaluations

The goal of usability testing was to evaluate the platform from travel agent's point of view and examine if users could get the certificate by studying the course materials and passing the final exam. Usability analysis was conducted through "Talking Aloud" usability tests with 8 users, coming from Switzerland (German part), Egypt, Poland, Belarus, Serbia (2), Armenia and Montenegro. The participants were within 25 - 35 years old; 3 of them were male and 5 female. 4 users out of 8 had never been to Ticino region. Each usability session lasted 1-2 hours during which participants needed to go through the whole platform (alfa version), study the course materials and pass the final exam. During the usability test user interaction with the platform was observed, recorded with the video camera as well as notes were taken. Interviews prior and after usability test were done.

## 5    Results

Based on the observation and interviews with participants, the usability findings (both positive and negative) can be categorized in 4 categories: General impression; Educational issues; Communication issues; Technical issues.

General impression: the overall participants' satisfaction of the platform was rather worthy. Users described overall studying experience as exciting, interesting and not boring. Interviews with the participants showed their positive attitude of using eLearning platforms in tourism and hospitality industry for the training purposes.

Education issues: most findings and comments were related to the structure and content of the didactic material within the course, interactivity and the duration of the course and testing activities. Participants agreed that there is a lot of information presented in a structured and thoughtful way. Users, who have been living in Ticino for some time, found new, useful and curious data. As positive elements, participants highlighted usages of the interactive animation, images and videos within the course materials. Interactive animation was perceived as a great advantage of this course over the similar ones. Regarding the testing activities, questions were perceived being hard, as they required users to go back to the course materials and be more focused on the details presented in the training texts. Nevertheless, users perceive it to be a positive fact, as "students" need to pay attention to the details. As the negative side, some of the participants noticed that parts of the course lasted too long comparing to the others. Also, the educational value of some parts of the course, like "Intermediate test" or some videos, were not clear to the participants.

Communication issues: findings are related to B2B aspect of the platform, e.g. if the platform provides travel agents with enough valuable business information, which can be used in order to sell Ticino. Mainly, participants found very useful selling tips and insights, as well as the links and brochures provided for the in-depth information about certain topics. As a main shortage of the platform, participants pointed out that on the training platform there was no information about actual prices.

Technical issues: findings are based on the usability issues related to the technology. The interaction with the platform had been described as "smooth and predictable", but still several usability problems were detected. Usability problems were mainly related to the navigation and quality of studying materials (technical side). For instance participants noticed some missing navigational links, pointed out ambiguous links and explained the difficulties they had while trying to find the course on "Ticino Turismo" website. Regarding the quality of the studying materials, participants perceived videos as being of a "good quality", except the videos in "Selling tips and testimonials" module.

Based on those usability findings, the improvements on the alfa version of the platform have been done and beta version of the platform has been launched.

## 6    Discussions and Conclusion

Participants of the usability testing gave positive comments and feedback about the platform. They appreciated the idea of having such a learning resource, as it improves their skills and knowledge about Ticino region.

All usability findings can be divided into 4 categories: general impression, educational, communicational, and technical findings. Those findings are suggesting that the key elements of a usable eLearning course are: the structure and content of the didactic materials, quality of the content (images, videos, maps), interactivity, and duration of the course, well designed testing activities and clear navigational paths. Moreover, the content should be adapted to B2B communication: it should be accurate, specific and unknown to broad audience; it should contain tips and insights for "selling" the destination and resources with more detailed information (e.g. websites, brochures, etc).

As a future step within this research, the UsERa Model (Inversini et al, 2011) may be applied to evaluate the final version of the eLearning platform combining actual usages - accesses to the eLearning platform, with usability issues and business goals of the DMO.

## References

Ardito, C., De Marsico, M., Lanzilotti, R., Levialdi, S., Roselli, T., Rossano, V. & Tersigni, M. (2004). *Usability of E-Learning Tools*. In Proc. of International Conference on Advanced Visual Interface in Gallipoli, Italy. New York: ACM Press: 80-84.

Botturi, L., Cantoni, L., Inversini, A., & Succi, C. (2007). Sustainable eLearning quality: A lightweight method from experience. In N. Buzzetto-More (Ed.), *Advanced Principles of Effective eLearning*, Hershey, PA: Idea Group: 161-183.

Cantoni, L. & Kalbaska, N. (2010). *eLearning offers by Destination Management Organizations,* In U. Gretzel, R. Law & M. Fuchs (Eds.), Information and Communication Technologies in Tourism. Proceedings of the International Conference in Lugano, Switzerland, Wien - New York: Springer, 247-259.

Harms, I. & Schweibenz, W. (2007). *Usability Engineering Methods for the Web Results From a Usability Study*. In: Knorz, Gerhard & Kuhlen, Rainer (Hg.): Proceedings des 7. Internationalen Symposiums für Informationswissenschaft (ISI 2000), Darmstadt. Konstanz: UVK Verlagsgesellschaft mbH: 17 – 30.

Inversini A., Cantoni L. (2009). *Cultural Destination Usability: The Case of Visit Bath*. In W. Höpken, U. Gretzel & R. Law (Eds.), Information and Communication Technologies in Tourism. Proceedings of the International Conference in Amsterdam, The Netherlands, Springer, Wien - New York: 319-331.

Inversini A., Cantoni L., Bolchini D. (2011). *Connecting Usages with Usability Analysis through the User Experience Risk Assessment Model: A Case Study in the Tourism Domain.* In A. Marcus (Ed.), Design, User Experience, and Usability. Springer - Verlag Berlin - Heidelberg: 283-293.

Nielsen, J. & Mack, L. (1994). *Usability inspection methods*. New York: J. Wiley & Sons.

Triacca, L., Bolchini, D., Botturi, L. & Inversini, A. (2004). *MiLE: Systematic Usability Evaluation for E-learning Web Applications.* In L. Cantoni & C. McLoughlin (Eds.), Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications: Chesapeake, VA: AACE: 4398-4405.