

How to Develop and Evaluate an eTourism MOOC: An Experience in Progress

Jingjing Lin,
Nadzeya Kalbaska, and
Lorenzo Cantoni

The Faculty of Communication Sciences
Universita' della Svizzera italiana (USI)
Lugano, Switzerland

jingjing.lin@usi.ch; nadzeya.kalbaska@usi.ch; lorenzo.cantoni@usi.ch

Abstract

Massive Open Online Courses (MOOCs) have gained much attention these years and continued to be developed and delivered, as well as to be studied. After a careful investigation about available MOOCs in the area of Tourism and Hospitality, an offer gap has been identified when it comes to presenting the applications of Information and Communication Technologies (ICTs) into the tourism and hospitality domain – eTourism. The ongoing journey that has departed from such gap identification, has brought to the development of a MOOC entitled “eTourism: Communication Perspectives”, which is briefly presented and described moving from the very drivers to initiate it up to its full development process. The paper outlines also how the delivery has been designed, and discusses in a quite detailed way on the evaluation to be undertaken, so to define relevant and measurable key performance indicators.

Keywords: MOOCs; eTourism; eLearning; tourism education; evaluation techniques

1 Introduction

The significant growth of Massive Open Online Courses (MOOCs) in higher education has prompted different academic institutions to join the community and offer their own eLearning courses. Towards this world-renowned educational phenomenon, there are two opposite attitudes. The optimists advocate various opportunities offered by MOOCs. As pointed out by Klobas, Mackintosh and Murphy (2014, p.3) that “the capacity of MOOCs to be massive reflects developments in information and communications technology and the pedagogy of online and distance learning”. On the contrary, pessimists pay attentions to the critical issues related to MOOCs such as the high drop-out rate, weak bonding of teachers and students, ignorance to pedagogy, mismatch of media and instruction contents, and heavy workload for the academic staff over routine teaching and research duties, etc. Despite the benefits by MOOCs, designing and running a MOOC can be a very time demanding task and require lots of efforts. Many MOOCs are launching online; however, very few providers are sharing the experiences from preparation phases under the spotlight. This study, in a case of a small Swiss university, aims to address the following questions: “What is the production and evaluation process of a MOOC?”

2 Three Drivers to do MOOCs

Università della Svizzera italiana (www.usi.ch [Sept. 8, 2015]), founded in 1996, is a Swiss public university. In 2014, it decided to produce two pilot MOOCs. This paper will be based on the case of *eTourism: Communication Perspectives* MOOC (<https://iversity.org/en/courses/etourism> [Oct. 20, 2015]), one of the two USI MOOCs. To understand why USI decided to be a MOOCs provider, three major drivers were presented below.

Driver one: Corporate Social Responsibility

Corporate Social Responsibility (CSR) refers to “a voluntary commitment a business makes in choosing and implementing these practices and making these contributions” (Kotler & Lee, 2005, p.3). One of the major drivers of USI MOOCs is to extend its social responsibility in the developing/emerging world as well as for those who could not attend regular in-presence courses.

Driver two: Public Relations

Besides investing in the existing Faculties, USI also plans to develop new initiatives designed to stimulate and enhance its unique profile within the universities system. The more and more European universities are becoming or considering becoming MOOCs providers. The adoption of taking a formal position in this community will improve public relations.

Driver three: Marketing

Marketing as the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large (Cohen, 2011) is another important driver for USI to develop its first MOOCs. It is believed that MOOCs, if properly designed and developed, can boost up the reputation of the university and possibly attract more and better students.

3 eTourism MOOC growth: ADDIE approach

The ADDIE model has been chosen to be used in the process of the eTourism MOOC design and delivery. This model consists five phases: analysis, design, development, implementation, and evaluation. Although the model has some limitations, such as it does not necessarily lead to the best instructional solutions nor does it provide solutions in a timely or efficient manner (Gordon & Zemke, 2000), or “it doesn’t take advantage of digital technologies that allow for less-linear approaches to instructional design such as rapid prototyping” (Bichelmeyer, 2005, p.4), it is considered as particularly effective in providing developers with a generic and systematic framework that is easy to use and applicable to a variety of settings (Peterson, 2003).

Analysis phase

According to the European Commission’s Open Education Europa (2015), by January 2015 there were over 3,842 MOOCs worldwide. By August 2015, in Europe there were a record of 1,759 MOOCs, which included 178 upcoming MOOCs. Despite of the fast expansion of MOOCs, the tourism and hospitality relevant MOOCs are very few (Murphy et al., 2015). According to IFITT Tourism and Hospitality MOOCs List

(2015), there are approximately nine existing MOOCs provided by universities in this area. None of them are related to the topic of eTourism or ICTs in tourism.

Design phase

The pathway for USI to develop the eTourism MOOC has been divided into ten phases: (1) university board meeting: initiation; (2) project proposal and funding; (3) team forming; (4) partner platform selection; (5) instructional design; (6) content creation; (7) video production; (8) course demo and promotion; (9) course delivery; and (10) internal project assessment. Between January and March 2015, seventeen platforms were selected and compared under four categories of attributes to choose the most suitable platform to host USI MOOCs (Lin, Kalbaska, Tardini, Decarli Frick, & Cantoni, 2015) and iversity (<https://iversity.org> [Sept.8, 2015]) was chosen as the partner platform.

Development phase

Starting from April 2015, the course instructors were preparing the video transcripts to describe the video contents. Between May and July 2015, the video shooting was in progress. It aimed to produce eighteen videos for eight modules and engaged four instructors, one video producer and two assistants in nine indoors and outdoors locations. The raw videos then were edited for several rounds before uploading to the MOOC platform. The full video production process is shown in Fig. 1.



Fig. 1. Nine-step video development process for eTourism MOOC, USI

Aligning with the video materials, other resources and activities were added accordingly. They are but not limited to syllabus, FAQ, quizzes, discussion exercises, video scripts, reading documents, and surveys, etc.

Implementation phase

Various channels were used to promote the eTourism MOOC. For instance, press office of the university and staff email signature, different social media, seeking school cooperation, and request to join the MOOCs aggregators' course lists, etc. The promotion period last for five months from June to October, 2015, though it didn't stop with the launch of the MOOC course. Starting from September, internal trainings were provided to both instructors and teaching assistants. The communication flow and facilitation steps were arranged to better cope with the forthcoming launch of the MOOC. Teaching and learning activities in the MOOC were finalized and for each of them the responsibilities were assigned to different teaching assistants to ensure the responsive feedback provided to learners on time.

Evaluation phase

Key Performance Indicators (KPI) are quantifiable measurements that reflect the critical success factors of an organisation. Whatever KPIs are selected, they must reflect the organisation's goals, be key to its success, and be measurable (Reh, 2005).

The idea of KPIs can be also applied to evaluate the success rate of a MOOC. In this case, the Kirkpatrick (1976) model was adopted. It is so far the most appropriate approach to the evaluation of training in organisations. The model consists of four levels of training outcomes: reaction, learning, behaviour, and results (Bates, 2004).

Reaction. Reaction was originally used to describe how much participants liked a particular training program and the term evolves along with time to assess trainees' affective responses to the quality (e.g., satisfaction with instructor) or the relevance of training (e.g., work-related utility) (Bates, 2004). Two indicators will be used concerning reaction. First, different types of learning behaviours will be identified and evaluated, which covers the following relations: S2C (Student/learner to Content), S2S (Student/learner to Student/learner), and S2T (Student/learner to Teacher/trainer/tutor) (Murphy, Kalbaska, Horton-Tognazzini & Cantoni, 2015). Second, the pre-course and post-course surveys provided by the MOOC platform provider will be analysed for users' reactions/feedback throughout the course.

Learning. Learning measures are quantifiable indicators of the learning that has taken place during the course of the training typologies (Bates, 2004). Along with the instructional design process, eTourism MOOC set up a list of learning outcomes about concept, theories, operation, and skills based on the Bloom's taxonomy (Bloom & David, 1956). The evaluation elements, including quiz questions, the further activities and final test in the MOOC, followed the taxonomy to enhance an effective learning scaffolding.

Behaviour. Behaviour outcomes address either the extent to which knowledge and skills gained in training are applied on the job or result in exceptional job-related performance (Bates, 2004). For those already in the industry, one evaluation indicator is performance tasks, such as the MOOC encourages learners to share "I-Do-Better-After-It" experiences in the course-level discussion forum to share stories that their job performance gets potentially improved by the influence of taking this online course.

Results. Results are intended to provide some measure of the impact that training has had on broader organisational goals and objectives (Bates, 2004). For the impact indicator, three drivers mentioned before will be used. For the corporate social responsibility, the MOOC aims to attract users from developing countries and from groups that are not likely to attend regular courses at campus. For the public relations, it is expected that through the MOOC (1) the visibility of USI in positive contexts will be boosted up: number of subscribers, and media consumption (e.g., accesses on YouTube); and (2) new collaborative projects with universities and tourism-related bodies will be developed. The marketing aspect is related to new students enrolling in paid programs as a consequence of having attended the MOOC or recommendation from the MOOC's attendants.

4 Conclusion

With three strong drivers behind the MOOCs initiative in Università della Svizzera italiana, this Swiss public university is breaking its boundary constrained by geography and now on its way to provide high quality online training offer to the

global audience. ADDIE model (analysis, design, development, implementation, and evaluation) has paved a systematic gateway for this study to explore the growth process of eTourism: Communication Perspectives MOOC, one of the pilot MOOCs produced by USI. Key Performance Indicators were implemented to support the evaluation of the MOOC's success rate.

The following limitations of this research should be mentioned. The project was ongoing and the MOOC was not online for teaching yet when this paper was written. Thus, the contents mentioned in this paper may change accordingly later along with the project progress and the actual results of the MOOC. On the other hand, this paper presents a case study of a small Swiss university and the result cannot be generalized. Future research which extends this study is suggested to (1) provide further studies about the evaluation models and factors concerning MOOCs success evaluation; or (2) to compare more universities concerning MOOCs evaluation.

References

- Bates, R. (2004). A critical analysis of evaluation practice: the Kirkpatrick model and the principle of beneficence. *Evaluation and program planning*, 27(3), 341-347.
- Bichelmeyer, B. (2005). The ADDIE model: A metaphor for the lack of clarity in the field of IDT. *IDT Record*.
- Bloom, B. S., & David, R. K. (1956). Taxonomy of educational objectives: The classification of educational goals, by a committee of college and university examiners. Handbook 1: Cognitive domain. New York, Longmans.
- Cohen, H. (2011). 72 Marketing Definitions. Retrieved on August 13, 2015 from: <http://goo.gl/MRNKkP>.
- Gordon, J., & Zemke, R. (2000). The Attack on ISD. Training, 43-53.
- IFITT. (2015). Hospitality and Tourism MOOCs. Retrieved on April 28, 2015 from: <http://goo.gl/1Nxhg9>.
- Klobas, J. E., Mackintosh, B., & Murphy, J. (2014). The anatomy of MOOCs. In P. Kim (Ed.), *Massive Open Online Courses: The MOOC Revolution* (pp. 1-22), New York, NY: Routledge.
- Kirkpatrick, D. L. (1976). Evaluation of training. In R. L. Craig (Ed.), *Training and development handbook: A guide to human resource development*. New York: McGraw Hill.
- Kotler, P., & Lee, N. (2005). *Corporate social responsibility: Doing the Most Good for Your Company and Your Cause*. Hoboken, NJ: Wiley.
- Lin, J., Kalbaska, N., Tardini, S., Decarli Frick, E. & Cantoni, L. (2015). A Journey to Select the Most Suitable MOOCs Platform: The Case of a Swiss University. In S. Carliner et al. (Eds.), *Proceedings of World Conference on Educational Media and Technology 2015*(pp. 247-257). Association for the Advancement of Computing in Education (AACE).
- Murphy, J., Kalbaska, N., Horton-Tognazzini, L., & Cantoni, L. (2015). Online learning and MOOCs: A framework proposal. *Information and Communication Technologies in Tourism - Proceedings of the International Conference in Lugano* (Switzerland). New York: Springer (pp. 847-858). International Federation for IT and Travel and Tourism (IFITT).
- Open Education Europa. (2015). The European MOOCs Scoreboard. Retrieved on August 18, 2015: <http://goo.gl/klzC19>.
- Peterson, C. (2003). Bringing ADDIE to life: Instructional design at its best. *Journal of Educational Multimedia and Hypermedia*, 12(3), 227-241.
- Reh, F. J. (2005). Key performance indicators (KPI). Retrieved on August 19, 2015: <http://goo.gl/z9Gk10>.