## **Digital Cultural Heritage and Living Labs**

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**Abstract.** The preservation and promotion of Cultural Heritage (CH) is of great importance for all countries for fostering cultural and historical awareness in their current and future generations of citizens. To this aim, a strict collaboration among public administrations, enterprises and citizens is fundamental. Experts from different disciplines, from public sector or private companies, have to share their specialized knowledge, skills, and practices. Besides, the citizens have to be actively involved as experts of the history and the culture of the places they grew up in and where they live. Technology is making great strides in CH field; information systems are no longer used only for archival and management purposes but also for supporting collaborative and distributed participation in a continuous research process.

Since 2007, the Computer Semiotic Laboratory (CSLab) of Università degli Studi of Milano (Italy) is actively involved in CH projects focused on the implementation of living labs aimed at facilitating the collaboration among all the stakeholders involved. In particular, the CSLab focuses on studying how to enable interdisciplinary collaboration between different communities of practice by understanding, capturing, and supporting creative processes that takes place in participatory design. Some of the open problems are: How may citizens actively participate in projects of digital heritage? What kind of roles can Web and mobile technologies play to facilitate the digitalization of CH information? Can living labs establish a more positive mutual learning relationship between visitors and local citizens? How will local citizens host this new wave of tourism? How can CH preservation and promotion become actual distributed activities aimed at generating more benefits to local communities?

Some of the research questions that have driven the CSLab research in these years regard: How to increase awareness and interest of the citizen-driven innovation approach within the Digital CH community through user engagement and multi-stakeholder collaboration; How to explore new areas of synergy between digital cultural heritage and cultural tourism in European cities; How to discover synergies between digital CH community, smart cities and living labs for experimenting innovative uses and re-uses of cultural content; How to integrate interdisciplinary researches into living lab contexts as ground for experimentation in culture and creativity.

adfa, p. 1, 2011. © Springer-Verlag Berlin Heidelberg 2011 According to these research lines, in this paper, a study developed in a rural area in North Italy (Valchiavenna Valley) is presented and discussed. This study has seen the participation of several communities of practice and citizens to the implementation of an interactive system for Valchiavenna Valley exploration, both on site and remotely.

**Keywords:** Collaboration, Interdisciplinary projects, Digital tourism, Wiki maps based, Learning and Education