

Homm-sw

Networks-of-stories to value tangible and intangible heritage in museums

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Abstract—Social inclusion, lifelong learning and the regeneration of competence networks are key processes which foster innovation. Museums may play an important role in these processes and ICT can strongly support the effectiveness of the interventions required. Among them, digital tools used to tell stories are becoming increasingly popular. Narratives in new dimensions enable the formation of personal and community identities, and the construction of meanings [1], [2]. Homm-sw supports multimedia narratives which enhance tangible and intangible heritage in education and cultural mediation, as well as in tourism.

Developed by Officina Emilia (Italy) and Crafts Museum (India), the application is online at www.homm-museums-software.org. So far, it implements the engine for creating and managing the activity 'networks-of-stories', to create a nonlinear and open multimedia narration [3],[4].

In the last decade, digital storytelling has spread rapidly due to the growth and possibilities offered by new ICT devices [5], [6]. Together with crowd sourcing it can deepen and enrich the understanding of tangible and intangible heritage. Digital storytelling still faces some critical challenges: creation of content on tangible and intangible heritage, classification and re-use of existing documents and clips, cooperative and coordinated production of new content. Moreover, for effective exploratory paths and a more analytical approach to browsing material, contents must be set in the overall perspective of the narrations, to ensure narration is coherent. Finally, validation and dissemination of related outcomes must respect scientific standards.

Homm-sw is based on four pillars: (1) a web system for creating and managing the community of users, authors, administrators of the sw platform and of contents; (2) ICT information points in the museum that integrate contents; (3) a website with a personal workspace that allows for the possibility to 'prolong the visit after the visit'; (4) a working group for production and content management, and a set of collaboration tools used to expand the storage of content. Homm-sw has tools that: support educators, also in contrasting learning difficulties, in developing inclusive and collaborative educational practices; support curators; facilitate crowd sourcing; create a personal web repository of contents and connections; share contents to be published, if approved by the administrator; create a network of contents and applications, at different levels for different users and specific needs.

Homm-sw extends the museum experience. Before the visit: users can have a general look at museum contents and note, in their online personal desktop, what they are interested in. During the visit: users can retrieve their notes and add what is available on the museum's exhibits and augmented reality, hands-on activities and multimedia contents, living laboratories, demonstration programs. Homm-sw in the onsite-mode allows only notes and memos, to fully enjoy what the museum uniquely offers. After the visit: users access their online workspace to retrieve and explore their notes, and any other content, as much as they wish.

Beyond those common to other ICT tools in use in museums, Homm-sw has two key innovative functions. First, recording and retrieval of users' activities: during the visit in a museum, the visitor accessing her account may browse and take notes in her personal workspace and then retrieve and explore them, and many more, as much as she likes after the visit. Second, narratives presented through a set of related clips (videos, albums, texts) are easily seen in the conceptual map proposed by the curators. Homm-sw can be shared with non-profit organizations which intend to develop new features and share the upgrade with previous users and with new users, on the same conditions. Other engines will be implemented according to the demands of users, together with multi-channel and multilingual extension. As a tool for digital storytelling, integration with other software applications is welcome.

Keywords—personalized workspace; storytelling; multilevel use; social inclusion; education; lifelong learning; crowd sourcing

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