Accessing and understanding heritage buildings through ICT. The INCEPTION methodology applied to the Istituto degli Innocenti

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Abstract: (250 to 500 words: for each heading use the bullet points or narrative - the submission including graphics should not exceed one page)

Problems - Issues
Challenges/Needs
The enhancement of digital cultural heritage accessibility is the ability to access cultural contents and resources for as many people as possible by using ICT functionalities and applications, overcoming cultural, environmental and management barriers for an easy and spread fruition. Beyond the application of ICT for management, research, diagnosis, conservation and restoration procedures, education and enhancement, new technologies allow the communication and dissemination of cultural assets that become more and more accessible for new knowledge and experiences; through digital technologies broad categories of users have access to European tangible and intangible cultural assets.

In this framework, the main challenges is:
 give more and more interactive possibilities to access, to exchange and to enrich the knowledge by means of interactive platforms.

Solutions - Methods
Results - Findings
Starting from new innovative approaches to digital documentation, the EU funded INCEPTION project develops an open-standard Semantic Web platform for accessing, processing and sharing interoperable digital models resulting from 3D data capturing and holistic documentation. An outstanding example of the overall INCEPTION process is the digital documentation of the Istituto degli Innocenti in Florence, Italy, by Brunelleschi, an extraordinary example of Italian Renaissance architecture. The optimized 3D survey, modelling and model semantic enrichment leaded to the upload of a set of data on the INCEPTION platform to be browsed by several users, expert and non-expert in the field of digital heritage.

Novelty - Value
Relevance to ...
The INCEPTION platform is a unique device to collect, link and enrich 3D models of heritage sites and buildings, allowing several researches and applications. The project is based on the close connection between state-of-the-art architectural modeling technologies (BIM, Building Information Modeling) and the latest web technologies. The platform is grounded on semantic web technologies in order to enrich heritage 3D models by using Semantic Web standards.

Forum statement
ICT and digital heritage play an essential role in accessing and understanding Europe's cultural basis and history

Keywords: (up to 5 keywords)
Heritage digital documentation; 3D survey and modelling; Platform

Graphics: (please use the gray area bellow for representative graphics or graphical summary: select the gray area bellow and paste your graphics)