

Digital, Interactive and Sensory Experiences exploiting VAR technologies for the Cultural Sector in Society 5.0

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Abstract

In the 5.0 society, new digital technologies become a valuable support to promote communication and social inclusion through digitising deliverable services. Thanks to the digitisation of cultural heritage, the 5.0 society can enhance human and sociological aspects through sustainable and user-friendly sensory experiences. In this sense, it is necessary to guarantee users, especially those with fragility, accessibility to places and information. For this reason, the research activity analyses the best methods and strategies to digitise the cultural and theatrical entertainment sector through interactive models that best simulate reality. The approach adopted starts from the digital model as a three-dimensional and informative representation (BIM) of the historical artefact and evolves into an interactive service model that meets various needs. On the other hand, the model connects to different navigation, visualisation and interaction platforms through virtual and augmented reality tools that make the activity a sensory experience. In this way, dialogue and communication through art and music can help vulnerable people overcome the obstacles that the human mind causes.

Therefore, by analysing different user groups, each experience proposed in this research work took into account the difficulties of learning cultural aspects in everyday life and their memorisation as elements of well-being. By customising activities and technologies, it is possible to establish cycles of activities related to the world of art and music to manage stimuli and produce new emotional states, transforming these experiences into therapeutic processes.

At the end of the process, the presented guidelines can become the starting point for transforming and adapting cultural heritage institutions into safe and suitable facilities for all users.