Understanding User eXperience aspects in Cultural Heritage interaction

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Our team

Intelligent Interaction
Intelligent Interaction Research Group

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II Group was established in June 2016. George Caridakis is the founder and coordinator of the group’s educational, research and development activities. The core of group consists of young researchers but also adopts an open collaboration scheme.
Intelligent Interaction Research Interests

Cultural Content & Management
- ✓ Digital Representation of Cultural Objects and Collections
- ✓ Technologies of Semantic Web
- ✓ Linked Open Data (LOD)

Context & User Experience
- ✓ User Experience and Cultural User Experience
- ✓ Internet of Things and Ubiquitous Computing focusing on the Context Awareness.

Promotion of Cultural Content
- ✓ Affective Computing
- ✓ Artificial Intelligence and Machine Learning
- ✓ Mixed/Augmented Reality
- ✓ Digital Serious Games on the domain of Education and Cultural Heritage.

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Our Approach

In our work, we aim in analyzing UX aspects and proposing methods to enhance user modeling

Describe the interaction process between Users and Cultural Heritage applications and products
Related Work

MultiMatch

Paths

ToArist

Fig. 9 The mobile application: the user’s favorites artworks (on the left), in-depth information of an artwork (in the center), and the map of suggested points of interest (on the right)

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Usability and UX aspects

- Reliability
- Ease of use
- Usefulness
- Efficiency
- Stimulating
- Accessibility
- Pleasure
- Identification

UX aspects / attributes
Cultural User eXperience - CUX

The interaction between different cultural objects and user’s cultural backgrounds defines the CUX as

“The unique produced knowledge and experience from different cultural identities”
Technologies influencing CUX
Personalization

“Personalisation is based on the assumption that an application can understand the user’s needs, while its success relies greatly on the accurate elicitation of the user profile”.

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Ontologies define the concepts and relationships (also referred to as “terms”) used to describe and represent an area of concern.

A semantic representation of user’s profile and needs could lead to more efficient and accurate user modeling methods.
Mixed Reality & 3D interaction

Mixed Reality (MR) techniques can be used to:

- "animate" archaeological sites
- "repair" statues and cultural artifacts that have been damaged
- "construct" monuments that have been lost over the years
- give museums the ability to "talk" to their visitor and present him additional information about their exhibits

MR make an activity or experience more meaningful for user.
Other Technologies

- Digital Storytelling
- Serious Games
- Context Awareness
Applications integrating CUX Technologies
Fig. 3. Mobile prototype screens
Final stage: CUX Evaluation
Common UX Research Methods in CH field

- Questionnaires
- Verbal comments
- Postcodes
- Interviews
- Comments books/forms
- Focus groups
- Take-up of offers (e.g. vouchers) and repeat bookings
- Enquiries by members of the public
- E-mails/letters of thanks or complaint
- Presentation/artwork of user group
- Observation of users
- Photographs & DVDs
- Media coverage
- Meetings (debrief)
- Mentoring & peer review
- Diaries
- Mystery shopping
- (Staff) facilitated visits
- Creative ('fun') methods
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Conclusion

- New technologies are vital not only to enrich the cultural experience but also to the sustainability of cultural organisations.
- With the user-experience research the GLAM’s (Galleries, Libraries, Archives, Museums) staff will have the opportunity to engage with issues of limited accessibility and reflect upon them.
- Understanding User eXperience aspects, GLAMs can make changes in the nature of what they offer to the public that are more consistent with the perceived needs of their visitors.
Thank you for your attention!
References

1. Hassan, H. et al., (2017), From usability to user experience, International Conference on Intelligent Informatics and Biomedical Sciences (ICIIBMS)


