Platforms EOI: Filling in the Blanks: 3D objects in an interactive, information-rich environment

Project title
Filling in the Blanks: 3D objects in an interactive, information-rich environment

Field of Research code(s)

- 10 TECHNOLOGY
- 13 EDUCATION
- 15 COMMERCE, MANAGEMENT, TOURISM AND SERVICES
- 20 LANGUAGE, COMMUNICATION AND CULTURE
- 21 HISTORY AND ARCHAEOLOGY

EOI Lead Name
Katrina Grant

EOI lead Organisation
Centre

EOI lead Email

Collaborator details

<table>
<thead>
<tr>
<th>Name</th>
<th>Research Group</th>
<th>Organisation</th>
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<tbody>
<tr>
<td>Lisa Beaven</td>
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<td>Gillian Shepherd</td>
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<td>Caroline Field</td>
<td></td>
<td>Australian Catholic University (involvement of this institution not yet confirmed)</td>
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Project description
This project will adapt Sketchfab™, an existing platform for displaying and sharing 3D models, to create a new platform that specialises in the display of cultural heritage objects. The platform will display 3D models enriched by accompanying specialist information to engage researchers, educators and others working in cultural heritage fields. This platform will make visible the hidden cultural collections and develop a set of tools and methodologies that can be deployed by other collections. It is envisaged that the interactive 3D models will act as portals to access a range of resources including podcast interviews with experts, video, links to related artefacts, collections, research, maps, plans, chronological, technical information, and potential for integration of haptic technologies. The outcome will be a radical increase in the visibility of university collections. It will support deep research into particular artefacts, and will make these cultural collections accessible for the first time to national and international researchers and the public using the FAIR principles. Although initially restricted to three universities, it has obvious potential for wider roll-out.

Existing technology
### Adopt

This project will maximise the utility of existing suitable technologies through the adoption of Sketchfab™ software and platform, which employs WebGL and WebVR technologies to enable objects to be displayed online in 3D, and accessible via standard mobile and desktop browsers or virtual reality headsets

### Adapt

The project will then further adapt 3D Sketchfab™ images through the incorporation of audio, video and text attached to the object itself, supplying further interactive object information.

### Build

Through amalgamation of existing technologies and the construction of any new applications required, the project will build a versatile technological package suitable for the incorporation of any item of material culture requiring better access, visibility and information for researchers and students worldwide

### Anticipated requirements

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<th><strong>Annual funding</strong></th>
<th>$0 - $99,000</th>
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<td><strong>Proposed length</strong></td>
<td>3 years</td>
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### Other information you wish to provide

Current practice in most museums for online artefact access is at best limited to providing a 2D photograph of an object, with the scanned catalogue entry attached. We intend to address these limitations by developing an immersive and interactive environment in which objects can be explored in full and in the round. This would enable an investigation of all aspects of an artefact including its biography, means of production, purpose, social and historical context, and current status. In short, the material artefact unlocks its own past. Museums are very keen to invest in this technology.

### Terms

I agree to the terms

Yes