Rethinking Digital Community Engagement for value-inclusive cultural heritage media using a digital first approach – Case of selected post-Jomon era funerary mounds, Japan

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1 Introduction – 8-SOW

The eight-stage operational workflow (8-SOW) is a workflow devised to improve the communication of values within a digital communication project for Cultural Heritage (CH). It begins with a 'stage 0', which is a preliminary collection of CH values from reliable sources. In Stage 1, the collected CH values are filtered to generate an initial vocabulary of values. Then, the significance of the selected CH values is assessed in Stage 2, using three steps or questions for significance assessment (Friedheim & Khalaf, 2016). The third stage is of a dialogic inquiry, where both experts and non-experts are asked to share their views on the CH values and what they see as valuable. The fourth stage deals with the gainful inclusion of multiple perspectives, obtained from the previous stage, into the design of the digital communication project. The fifth stage covers the contextualization of the values and perspectives, while the sixth stage deals with the design of the initial prototype, after which a targeted evaluation is done to collect user feedback (seventh stage). The eighth and final stage is where the feedback is analyzed, and an iteration is done to the design of the digital communication project or experience. The application of the 8-SOW provides us with a concrete method for the realization of a digital communication project that can effectively communicate CH values, with positive impact on learning and engagement with interested and willing participants. It has been preliminarily applied to create a web-based digital application that explores the CH values of the artefacts in the Menorah collection at the Hecht Museum in Haifa, Israel (Goud et.al., 2022).

Here we leverage our learnings from the previous deployment of the 8-SOW to improve the creation of value-inclusive multimedia for the BeArchaeo project. This iteration of the 8-SOW collects user preferences in order to increase the engagement of digital communities that are interested CHComm and knowledge sharing. To test this iterated eight-stage process we use the 'BeA-ViR' system which is a part of the

'BeArchaeo' project (Lombardo & Lauro, 2022). We build on the exercise that was conducted at the Hecht Museum by altering the 'stage 0'. In the current study this stage is expanded to include a 'digital first' approach where we search out and communicate with digital communities that are interested to participate in the CH knowledge sharing process. This is done to increase the impact of the CH Communication (CHComm) endeavor through a wider outreach and to identify methods through which digital multimedia projects for CHComm can be made sustainable. Due to this change, the 8-SOW becomes a value-inclusive framework that is suited for increasing digital engagement.

2   Be-A-ViR system and the BeArchaeo project

The current implementation of the 8-SOW is used to create a companion application for the BeA-ViR system. The BeA-ViR system developed as a part of the BeArchaeo project was designed to help users explore the excavations from post-Jomon era funerary mounds uncovered in the Okayama Prefecture and the nearby prefectures of Shimane and Tottori in Japan (Lombardo & Lauro, 2022). These funerary mounds are believed to have been built as tombs to kings and nobles of the Kofun era and later (250 AD or later). Very few such sites have been fully explored and many larger monuments are currently untouched and hold a special place in the collective consciousness of the Japanese and international archaeological community. The BeArchaeo project is a collaborative effort by multiple institutions located in Europe and Japan. Experts in archaeology and archaeometry worked together on the excavation of the Tobiotsuka Kofun, Soja city, Okayama prefecture, Japan. A Google search for the term 'Tobiotsuka Kofun' yields multiple results covering the various research publications and websites related to or reporting on the BeArchaeo project in the first page of the results, as of the beginning of March 2023. This is a result of the efforts of the project to disseminate its gathered information. Even so, the YouTube channel for the BeArchaeo project has a total subscriber count in the low double digits with similarly low views and limited interaction. On the one hand, the project is a very recent project and is less than a decade old even though the archaeological site itself is almost 1500 years old and on the other hand, it can be stated that information on the heritage properties from countries where English is not a majority or official language of communication might not be available on the internet when searched for in English. At this point, it is beneficial to note that all of the online sources related to the BeArchaeo project are multi-lingual and English is at least one of the options for information display.

3   Methodology

As a digital first initiative, the goal of this application is to shed light on why and how digital communities gain knowledge of cultural heritage (CH) properties. Then this understanding is used to develop an outline for community engagement of the selected case.

To achieve this goal, we approach the study in two parts.

1. A random sample of users are selected from various social media sites and Internet forums. They are asked to mention what CH assets or properties elicited an interest in them to take part in CH knowledge sharing. These could be CH assets that they personally identified with. They are also asked as to how they go about gaining CH knowledge regarding these assets or properties. They are asked to mention what CH assets or properties elicited an interest or an identification with and how they proceed to gain knowledge regarding these assets or properties. Users are then asked to share why they have chosen such knowledge sources and how they have come across these sources in the first place. The perceived authenticity of the source of CH knowledge and the user perceptions regarding ease of access, ease of understanding and their preferences on type of digital engagement with the CH experience are assessed.

2. A companion experience is designed for the BeA-ViR system which has already produced a VR recreation for selected archeological finds of the BeArchaeo project (Lombardo & Lauro, 2022). The findings from the first part are used to take a digital first initiative while designing the companion application for the BeA-ViR system. This value-inclusive companion experience is developed by following a modified version of the 8-SOW that was tested at the Hecht Museum. A random sample of users are selected to review the companion application for both its digital first elements and the value-inclusive aspects.

4 Results in brief

The first part of the study involved members of various Facebook groups with at least 1000 members discussing CH and had at least one post on a relevant topic related to CH, made every week. A survey asked to share what came to their minds when they heard the term 'cultural heritage' and how they gathered information on their topics of interest. All respondents were graduates and 81% of them were 30 years or above, with the 30-45 age group making up half of the respondents. More than half of the respondents were from countries where English is either a language spoken by most of the population or is an official language of communication. This was an expected outcome as the questionnaire was in English and the selected online forums of discussion were also primarily in English. For a comprehensive global picture, the survey needs to be carried out in more widely spoken languages (such as French, Spanish etc.) which can be attempted as a part of future research.

The answers to the questions highlighted that at least 60% of the respondents use the internet as their primary source of information on CH. Only 10% of those who use the internet preferred to check for specific websites that were from CH institutions. Google search results and YouTube 'lectures' were points of initial information gathering related to cultural heritage topics of interest. Blogs were also mentioned by 10% of the respondents. Only 20% of the respondents who used the internet as their prima-

ry information source, proceeded to either search for books on the topic or go to libraries to find related literature. Of the total respondents, 12% were inclined to visit museums or the heritage sites provided they have access to such facilities and affordability was also a factor. Around 15% of the respondents were willing to talk to other people who were either experts in the heritage field or were connected to the community to which the heritage is commonly associated with. This shows us that an internet presence which can be tracked by search engines is a necessity for any large-scale heritage project. A digital-first approach is the best way to get authentic heritage information out to wider communities which are active and are willing participants of the heritage knowledge sharing process.

The second part of the study is the development of a companion application for the BeA-ViR system. Enhancing the reach of authentic CHComm is an important aspect of any CH project and a stated goal of UNESCO. In service of this, the 8-SOW is being applied to the heritage properties and knowledge that has been unveiled by the BeArchaeo project. The BeA-ViR system was previously used at an exhibition in Japan where users were provided with explanatory panels and were then given access to the VR system in which they could explore the virtual recreations of the sites and artefacts along with short text blurbs that described the points of interest. The 8-SOW process is modified to create an application that better serves the needs of digital communities and acts as a companion application that can be used in conjunction with the BeA-ViR system when it is developed to be a standalone tool. Our understanding from the first part of the study led us to approach the development of the application with an increased focus on contextualization. The term 'Kofun' refers to the funerary burial mounds in which important political and military figures are entombed. The period from the 3rd to 7th century AD in Japanese history is also known as the Kofun period since this practice appears to have originated at the time. The periods of Japanese history and the religious, social, political values of the time may not be well known to digital communities that are not aware of Japanese heritage contexts. This coupled with the fact that the BeArchaeo project is a much more recent excavation leads us to conclude that a dialogic design approach which involves digital communities for citizen curation of the content of the application is necessary.

5   References:

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