

Clouds, competence centres and research infrastructures in the cultural heritage domain

Wednesday, 2 October 2024 16:50 (10 minutes)

The proliferation of terms used to characterize digital infrastructures providing services for cultural heritage reflects different perspectives on their role but may be confusing for their potential users. Deciding what is a research infrastructure (RI) and what is not may affect stakeholders' understanding of them and the related use, and impact on their funding, where support to their creation and management depends on the legal definition of what is eligible and what is not. Adding the qualification of "research" to such infrastructures further complicates the situation, as it also involves the understanding of what research-oriented means. Cultural heritage is a domain in which the term "research" has a broad connotation, including activities performed according to the methodology of social sciences and humanities and to the scientific method (within the so-called heritage and archaeological sciences) and requires a tailored approach to digitization. Important research results can be achieved both by professionals and by researchers, thus also the target user communities can have fuzzy delimitations.

Attempts to identify different approaches to research date back to the well-known study by Stokes, which distinguished among fundamental research, use-inspired research and solution-oriented applied research, with most of the research activities in cultural heritage belonging to the second and the third categories. This distinction was considered in a study carried out in 2018 by the RI-PATHS EU project, which included competence centres in the third grouping but also considered the case of multi-purpose RIs. Digital infrastructures are not considered separately in this RI-PATHS taxonomy, or just mentioned as data and service providers. This requires an update, since research activities now increasingly consist or rely on digital services. Notable examples of digital research infrastructures on cultural heritage are national initiatives such as DIGILAB.be, a Belgian data infrastructure for conservation, and HSDS in the UK, a similar one in the UK. Similarly, the ARIADNE RI provides a catalogue of 4,000,000 archaeological research datasets with services to process the data they contain. A European initiative is 4CH, implementing a European competence centre for heritage conservation relying on a knowledge base of heritage information. Thus the question moves to the digital backbones of the above and how they could be further developed to reap the benefits of an advanced digital transformation. The just started ECCCH project aims at developing cloud-based vertical services for the different heritage communities, and will deploy its results by 2029.

So the main question seems to be not just which services are required, but in which cloud environment they should be implemented. If answering to the question "is a cloud the place to develop a digital research infrastructure for cultural heritage" has an obvious positive answer, the features of such cloud still need clarification and further investigation. The present contribution will discuss this question, with a focus on the digital services to be provided by 4CH in its development as an international digital research infrastructure and competence centre.

Topic

Data innovations: Business models

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Session Classification: Powering Collaboration: Technical Computing and Data Continuum Requirements