



WWW.ARCHES-PROJECT.EU



@ArchesEU



@ArchesEU

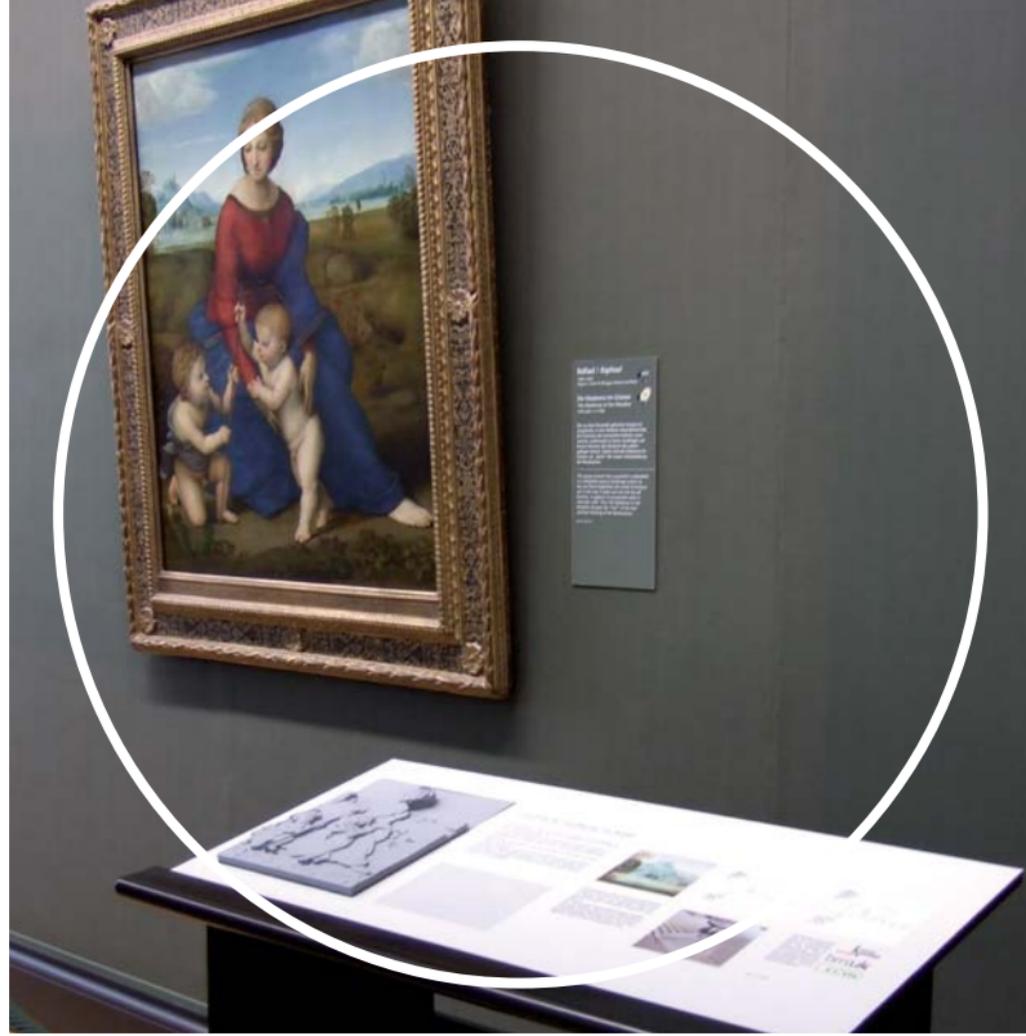


THE PROJECT

ARCHES “Accessible Resources for Cultural Heritage EcoSystems” aims to create **more inclusive cultural environments** particularly for **people with differences and difficulties associated with perception, memory, cognition and communication**. It will achieve this through a participatory research methodology and the development of innovative applications, functionalities and experiences based on the redevelopment and reuse of digital resources.



Our **interdisciplinary** consortium – involving academia, SMEs, research centres and six museums – will focus on ensuring **widespread communication** and exploitation, stimulating **cross-border collaboration**, generating an **innovative ecosystem** to address a challenge common across Europe.



THE PARTICIPATORY RESEARCH METHODOLOGY

The research methods underpinning the work of the participatory research groups are **based upon the highly successful Access to Heritage Project Forum**, which began in 2004 in Liverpool and Merseyside. In order to reflect its findings and to be true to the principles of participatory research, our proposed research will **establish a pilot group within the UK that will collaborate with the technical partners as well as the professionals of the Victoria and Albert Museum (V&A) and The Wallace Collection (WC).**

Initially, the UK based participatory research group will work over a 6 month period so as to design a range of artefact interfaces and functionalities. During this period, **other partner museums will** travel to London to receive



training with the purpose of subsequently **establishing local, similar sized research groups** (around twenty people) **who will work alongside V&A and WC across another two further periods of six months**, undertaking local evaluations of the technologies and resources and their suitability in enabling access to a range of cultural artefacts through digital cultural assets.

As a result, the strategy will be **replicated in Spain** (Museo de Bellas Artes de Asturias, Museo Thyssen-Bornemisza and Museo Lázaro Galdiano) **and Austria** (Kunst Historisches Museum Wien).



THE ACCESSIBLE SOFTWARE PLATFORM

The software platform will implement **several functionalities and options** to facilitate the interpretation of digital images, surrogates and models obtained from the Internet or uploaded by the visitor. In addition, newly developed tools will enable the **generation of innovative educational materials**.

THE APPLICATIONS FOR HANDHELD DEVICES

The applications for handheld device will the target users to enjoy their visit to museums – on their own or with other people – thanks to the functionalities that take advantage of **augmented reality and real-time processing** techniques. **Two alternatives** will be developed: (i) **a basic version** ready to be used at any museum and (ii) **an extended version** in which extra functionalities are incorporated, resulting from close collaboration between the designers and the cultural heritage sites, sharing knowledge of the collection, the facilities and the nature of the digital assets.





THE DIGITAL CULTURAL ASSETS

Digital cultural assets will be the input for the inclusive system to be developed under the framework of ARCHES. **Different options** will be considered to collect already-existing digital resources in the field of art such as, for example, making use of the **existing APIs** released by different entities and **other dedicated portals**. Besides, we shall explore alternative **digital assets held within the archives of participating cultural heritage sites**.



THE DESIGNERS

Partners specialised in Information and Communications Technology (ICT) will actively support **the creation of more inclusive environments**. They will put their experience and expertise at the disposal of the aforementioned participatory research groups to design, implement and test a wide range of applications, functionalities and tools.



THE ON-SITE SENSORY ACTIVITIES

The on-site sensory activities will be organised in collaboration with the cultural heritage sites, exploring and encouraging **novel ways of understanding artefacts** – not yet possible with desktop and handheld devices – through the capitalisation of the state of the art technologies. This will include at least: tactile images, a relief printer, context-sensitive tactile audio guides, the use of colours and textures in games, etc.



THE VALIDATION AND PILOTS

Our participatory research methodology situates real user needs at the heart of an iterative design and implementation process, through their active involvement in **three pilot exercises**. This will also facilitate the **validation** of potential solutions in scenarios **at six museums**, as well as **engagement with broader audiences** (e.g. children, the elderly, and other potentially marginalised groups) and **extension to other sectors**, mainly education and tourism.

PARTNERS



artecontacto

MUSEO DE
BELLAS
ARTES DE
ASTURIAS

THE
WALLACE
COLLECTION



KUNST
HISTORISCHES
MUSEUM
WIEN

MUSEO
THYSSEN-
BORNEMISZA



museo
LÁ
ZA
RO
GAL
DIA
NO

V&A

COORDINATOR

treeologic



The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 693229