

MEMEX



MEMories and Experiences (MEMEX) for inclusive digital storytelling

NEMO

April 27, 2022



@memexproject



2019-2022



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870743

MEMEX



General introduction

Alessio Del Bue – Italian Institute of Technology



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Social Goal

Design guidelines and recommendations to promote actions for social inclusion with strategies for audience engagement and development

Technology Goal

Advanced and easy-to-use ICT tool on smartphones for non-expert users to create their own stories and engage geolocalised storytelling with AR

Best practices for social inclusion

Strategies for audiences engagement

Access to Cultural Heritage with ICT collaborative tools

MEMEX Objectives

Tools to benchmark social inclusion

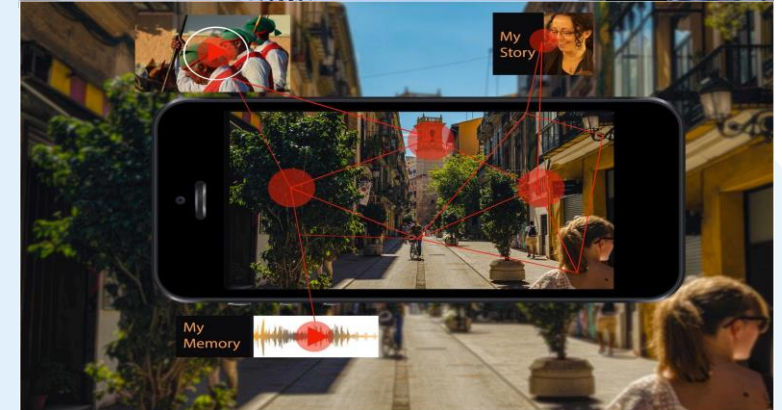
Social analysis for communities needs

Design of new audience development strategies

Co-design of compelling storytelling with AR on smartphones

New KG infrastructure for assisted storytelling

Geolocated annotation of CH asset



Social Inclusion of targeted communities

Socially fragile targets that are systematically blocked from various cultural opportunities and resources: Refugees, Migrant women, population in a situation of risk of exclusion due to poverty.

Social inclusion through storytelling and a prototype App for digital creation and visualisation of the stories.



inter
arts



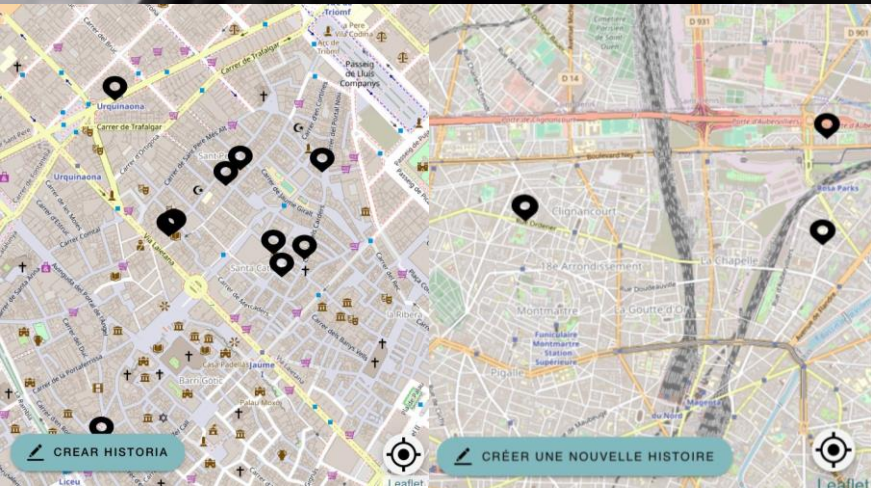
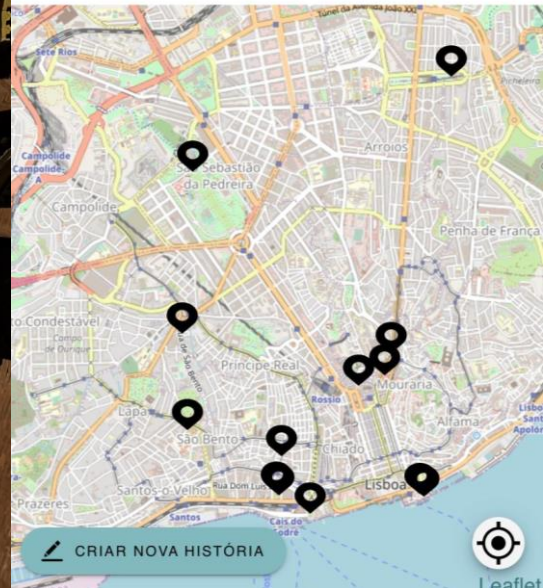
Michael
Culture
Association

dedale



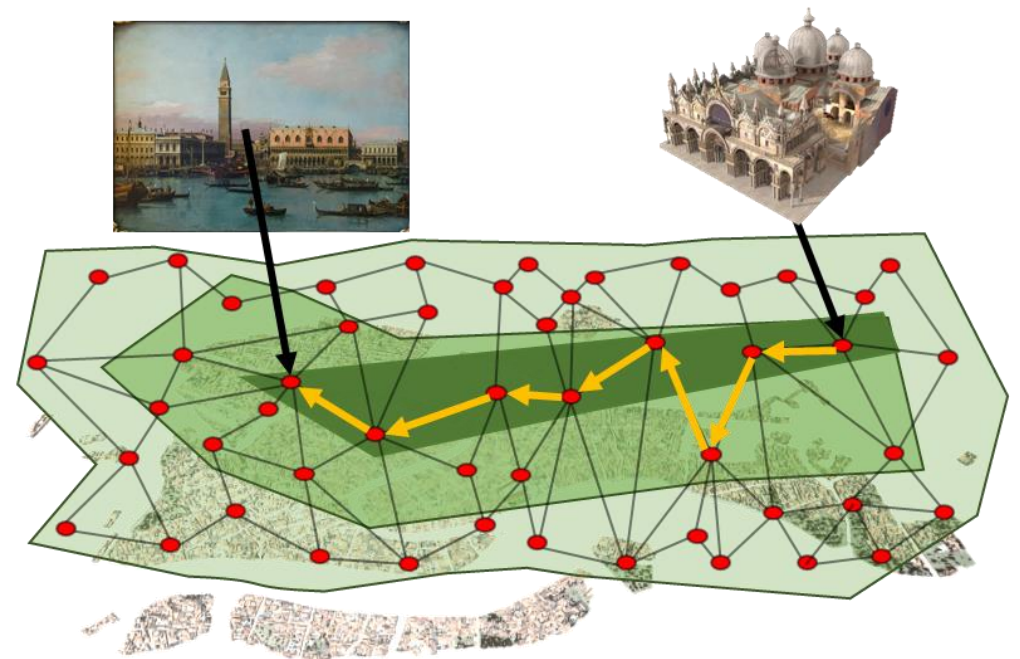
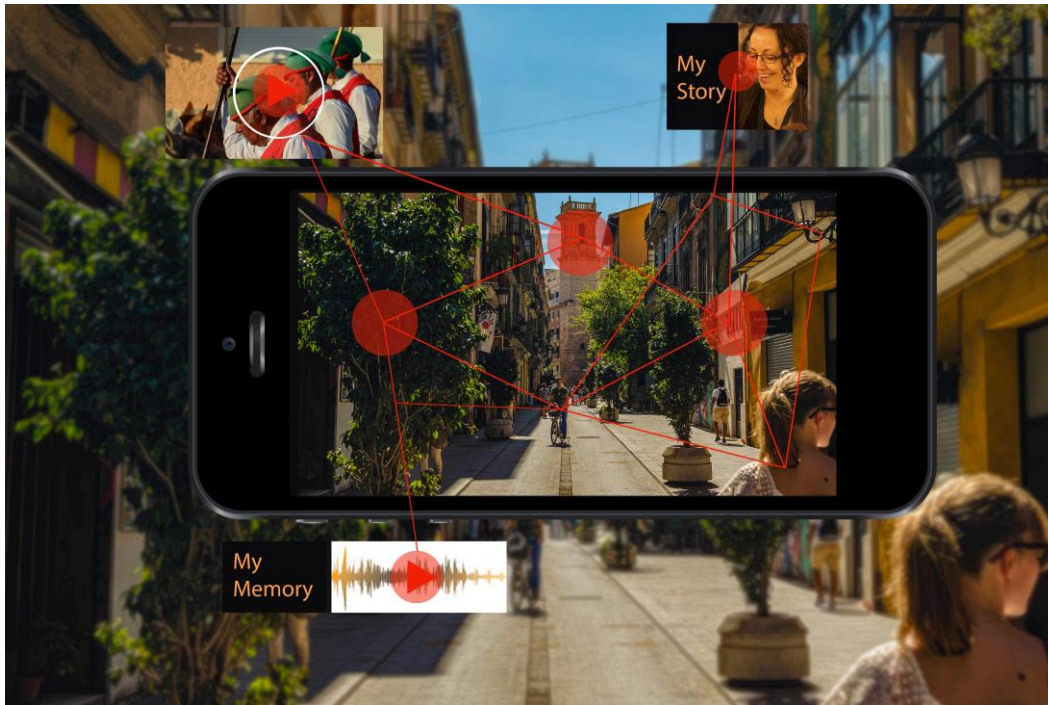
MAPA
DAS IDEIAS

MEMEX: a map of memories, experiences, emotions and relationships with cultural heritage



The technological embodiment of MEMEX

MEMEX ICT tool is a **prototype App** on a smartphone that enables digital stories creation and their visualisation in our physical spaces using Augmented Reality (AR)



MEMEX



Digital storytelling methodology and policy recommendations

Cristina Da Milano - ECCOM



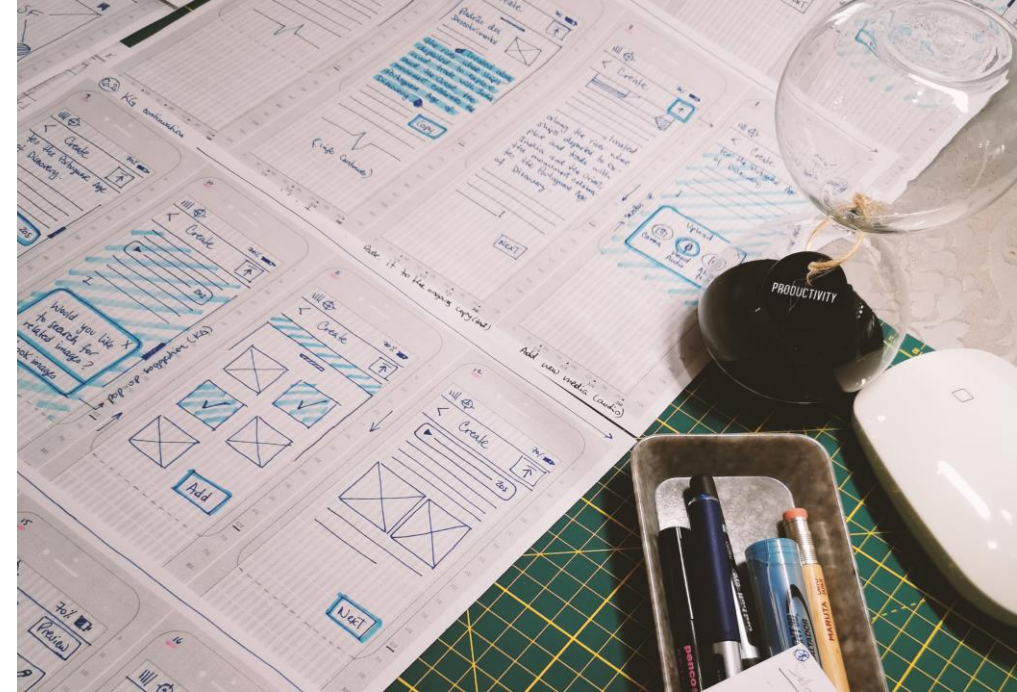
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MEMEX: an innovative cross-sectoral approach

Co-creation process between technological and social partners



A methodology based **on storytelling & technological innovation**





Digital storytelling

- Digital Storytelling is a **creative practice and process** combining the art of telling stories and technology to develop short **personal stories in a digital format**
- Strong **autobiographical perspective**
- Connection to **cultural heritage** (acts as a trigger).

Policy recommendations

1

Capacity building actions targeting cultural and social professionals involved in community engagement as key tool for inclusion (July 2021).

2

Assessing social impact in MEMEX (November 2021).

MEMEX



MEMEX pilot activities: Barcelona, Paris, Lisbon

Interarts (Spain) - Fran Gracia

Michael Culture Association (France) - Corinne Szteinsznaider

Mapa das Ideias (Portugal) - Ivo Oosterbeek



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Barcelona's migrant women and the gender perspective

Summary
Migrant women, coordinated by a group of experts and artists, will participate in workshops and co-creation activities related to the participants' personal histories and their connection with Barcelona's cultural heritage. The pilot will adopt a gender perspective, with the aim of increasing visibility of the group of participants and empowering them. The pilot will be implemented in collaboration with **laBonne**, a cultural centre dedicated to women, located in Ciutat Vella. The activities will be carried out, all considering culture as a driver for human and social development, creating reports, policies, stories and cultural projects to inform the community, academia and government.

The challenge...

- Migrant and refugee women are more exposed to risks, exploitation and violence because they are largely young, single and poor.
- Living in another country can create a condition of isolation and a situation of discrimination causing greater vulnerability.
- Often, migrant and refugee women are also victims of structural violence, occupying the lowest socioeconomic positions due to the negative effect of the intersection between gender, origin, social class and administrative situation.
- In addition to this complex situation, they suffer discriminations relating to religious interpretation, cultural practices, beliefs and sexist attitudes.
- Their level of engagement in local cultural life is still quite low.

Ciutat Vella

Migrant women community
Migrant Women resident in Barcelona constitute an invisible community in the framework of local cultural policies.

- Barcelona, a city of more than 1.6 million inhabitants, of which **103,429 live in Ciutat Vella**.
- According to official statistics of Idescat (Statistical Institute of Catalonia) the percentage of **foreign residents in Ciutat Vella is 48.26% of the total population**. The main nationalities of the foreigners inhabiting the district are Pakistan, Italy, Philippines, Morocco and France.
- Migrant women represent the 48.4% of the total migrant population.**

WP Lead



District XIX: Digital storytelling with inhabitants in priority neighbourhood of Paris

Summary
An enriched cultural route in district XIX in the north of Paris - Rosa Parks area. This is a priority territory and depends on a specific urban public policy. The Rosa Parks pilot will have a focus on population in a situation of risk of exclusion (young people, senior) due to poverty, urban environment access to culture and academic heritage. MEMEX will develop narratives based on digital heritage archives, inhabitants shared memories and a storytelling approach in order to improve the area identity and to give access to knowledge.

The challenge...

- Social exclusion
- Unemployment
- Socially fragility of young people (early school leaving),
- Security problem,
- Lack of local facilities -- no library
- Tensions between arrondissements.

In addition Rosa Parks is often affected by high density of refugees people (one of the bigger migrant's settlement of Paris during the year 2018).

Rosa Parks

The community ...

- Young age population** with 19% under 15, and 43% under 30. This is much higher than the rates observed in Paris and the 18th and 19th arrondissements (districts).
- Over 40% of the Rosa Parks' **inhabitants live alone**. This proportion is lower than in Paris as a whole, but unlike Paris, it is mainly men who are alone.
- A high proportion of family are **single-parent families**, 27% of households is much higher than the averages observed in Paris.
- A **high unemployment rate** at almost twice as high as in the capital as a whole.



Enhanced retelling of Portuguese heritage through empowered voices

Summary
The historic centre of Lisbon is marked by the coexistence of two processes of urban transformation: the establishment of non-European migrants and a slow, seemingly unstoppable process of gentrification, whose concurrence has led to an environment of renewed cultural and ethnic diversity. However, potential tension emerges, giving rise to a particular paradoxical contrast between a tolerant, multicultural and locally committed social and a fragile integration of migrants into local social networks, severely limiting their contribution to the revitalisation of the old city. MEMEX will address this large and very often uninhabited space between the will and the might of giving voice to the under-represented stories of Lisbon's migrants.

The challenge

- Bypass local gentrification by building a 'community of choice' based on the shared activities of individuals
- Explore individual cultural representations of heritage to promote a wide notion of cultural heritage by recognizing shared common and simultaneously diverse identities.
- Erase tensions between stereotypical roles of cultural producers and cultural consumers through storytelling.

Historical Centre

The community
The project will work with a large variety of migrant adults, with different national and cultural origins, genders and ages. Refugees, recent migrants, long term migrants and naturalised migrants, from a large pool of original geographies: South-American, Asian, Middle-Eastern, European and African, residing throughout the whole metropolitan region, engaging with Lisbon's symbolically charged historical centre. It will attempt to engage with this diverse group in meaningful ways, diverting the research centre from a 'community identity' to the 'concrete individuals' experiences and cultural representations, challenging a largely euro-centric cultural heritage discourse strongly shaped by a contested colonial past. The focus will be on our current identity as reshaped by contemporary cultural encounters.



With the active collaboration of:



Some Data: +80 participants, 100 stories

Barcelona

- 35 participants
- Workshops
- 29 stories + 7 podcasts
- 17 usability & user experience tests so far
- 1 capacity building event

Paris

- 15 participants
- Workshops
- 21 stories
- 15 usability & user experience tests so far
- 1 capacity building event

Lisboa

- 33+ participants
- Workshops
- 35 stories
- 10 usability & user experience tests so far
- 1 capacity building event



Local partnerships

Partnerships help reduce the stress of EU-project burnout: migrant communities often participate in projects and feel “abandoned” when funding ends.

Cultural organizations that develop work with migrant communities/people at risk of socio/cultural exclusion

- Preference to those with interest /already working in social inclusion/gender

Migrant associations/social organizations working in social inclusion processes and co-creation projects

- Aim: give support to existing community culture-based projects.
- Listen to the communities needs

Common Challenges

- COVID-19 restrictions — smaller groups, outdoor filming sessions, sick people, exclusion of some people who did not have technologies
- Managing drop-outs
- Working in a short time process: mobilisation, story creation and evaluation
- Engage participant in a long-term process
- Ensure mobilisation of participants



Pilots-Specific Challenges

Barcelona

- Support to less tech-savvy participants
- Manage expectations / frustrations

Paris

- Gathering together a diversity of participants – heterogeneous
- Support to less tech-savvy participants
- Lack of cultural institution & of access to culture and heritage

Lisbon

- Due to migrant's status of precarious situation in the country, their main goal is centered on primary needs such as work and housing
- Weaknesses for the integration of at-risk migrants: lack of associations/organizations in the field of culture



Common Achievements

- Strong emotional involvement of the participants during story creation session
- Growing group of stakeholders: local social and cultural organizations
- Creation of safe spaces where participant felt accepted and integrated in a group that values their opinions and visions
- Opportunity for individual and collective expression.

Pilots-Specific Achievements

Barcelona

- Participants felt heard and were able to dialogue with and on the CH of the city.
- Successful participatory and co-creation processes.
- The group of women became even tight after sharing personal stories (community development)
- The DS workshops (process and methodology) have attracted broader interest from other collectives and stakeholders in the city.

Paris

- Increase of digital skills and discovery of digital cultural heritage
- A pride in participating in the valorisation of the neighbourhood that appears to have a "bad reputation"
- Re discovery of the History and urban transformation of the area
- Synergies between participants and also between the stakeholders
- The process and methodology have attracted broader interest from other stakeholders and municipality

Lisbon

- Increase of communication skills and eagerness to understand and learn a new language
- Increase in cultural awareness by participants who start to feel like they "own" a little of the city by being able to show heritage and talk about it with others
- Pharmacy Museum highly encouraged to become a space where migrants feel welcomed in

Digital Storytelling at the Reggia di Caserta

- ECCOM carried out a cycle of digital storytelling workshops at the Royal Palace of Caserta (Italy) between November and December 2021.
- The experience was part of the participation process started with the review of the UNESCO Site Management Plan of the Royal Palace.
- The participants created their personal digital stories, inspired by their memories and experiences around the heritage of the royal residence.



Digital Storytelling at the Reggia di Caserta

- Participants: 6 +60 subscribers, one member of the staff and 1 researcher.
- Methodology: shortened version of the MEMEX pilots' methodology, including all phases.
- The workshop was divided into 5 face-to-face meetings, during which the participants constructed their stories, selected places and soundtrack, registered their voices and the settings of their stories with the help of a technician, who edited them. The results were shared online in March.



MEMEX



Technology & MEMEX App

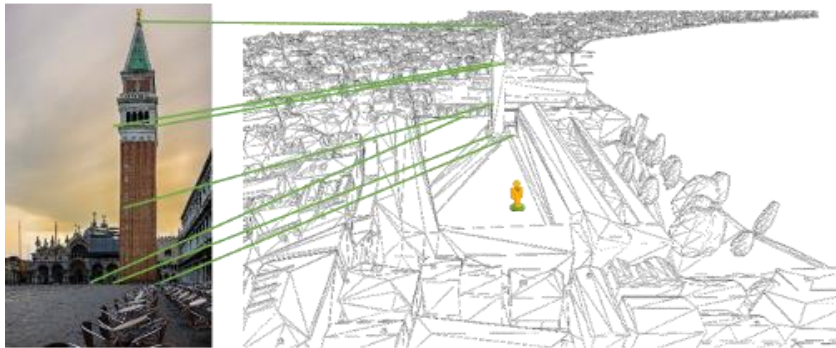
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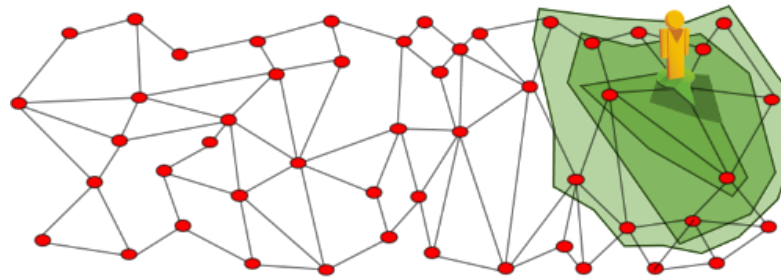
MEMEX: under the hood...

We are building a new **AI platform** for geolocalising CH assets, their associated digital information as in a Knowledge Graph, and the creation of Augmented Reality (AR) spaces



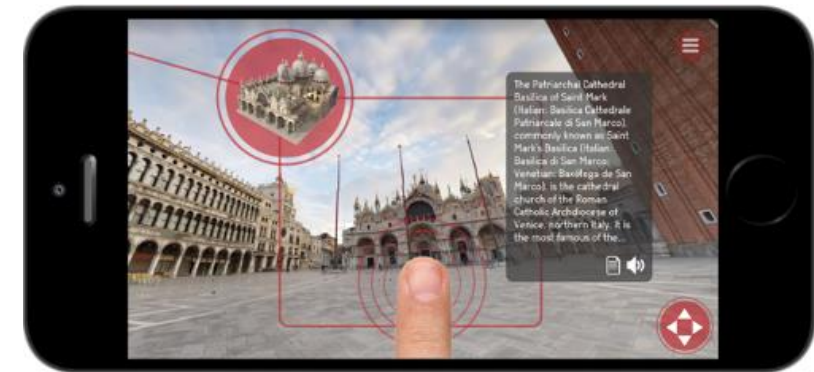
Localisation

Computer vision based automatic localisation of users and objects.



Knowledge Graph

Creating new infrastructure for geolocalised Cultural Heritage to reason on.



Storytelling through Augmented Reality

Assisted story creation and visualisation using advanced AR technologies.

Localised data sources

WIKIDATA

OpenStreetMap

Mapillary

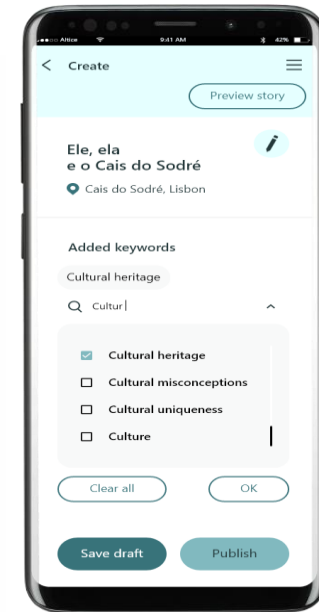
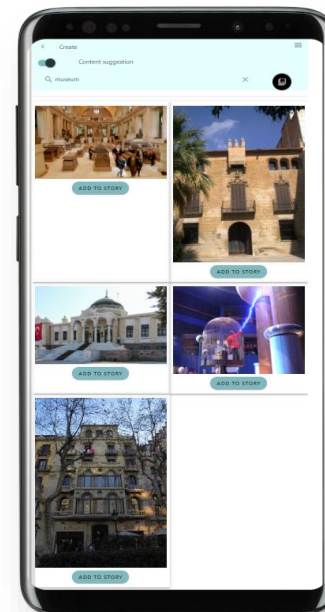
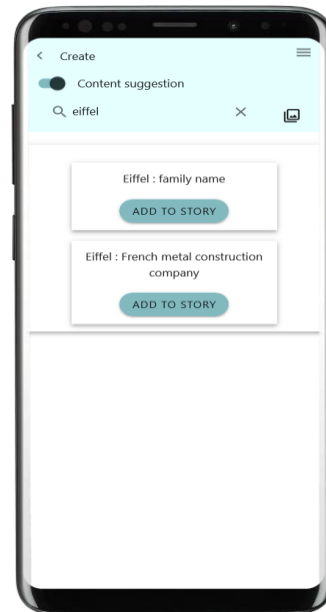
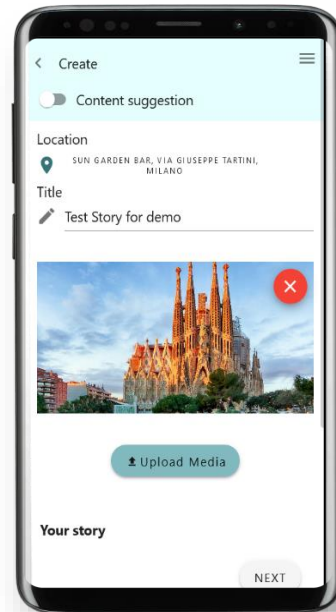
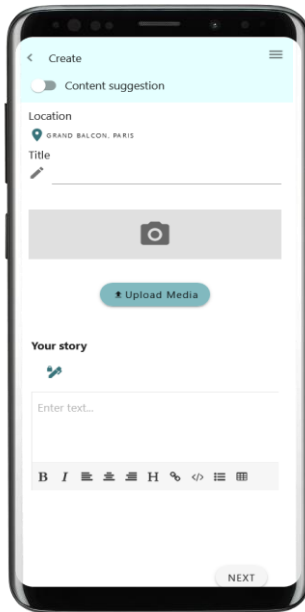
Databases:
Local archives and Museums,
+

europaena
think culture

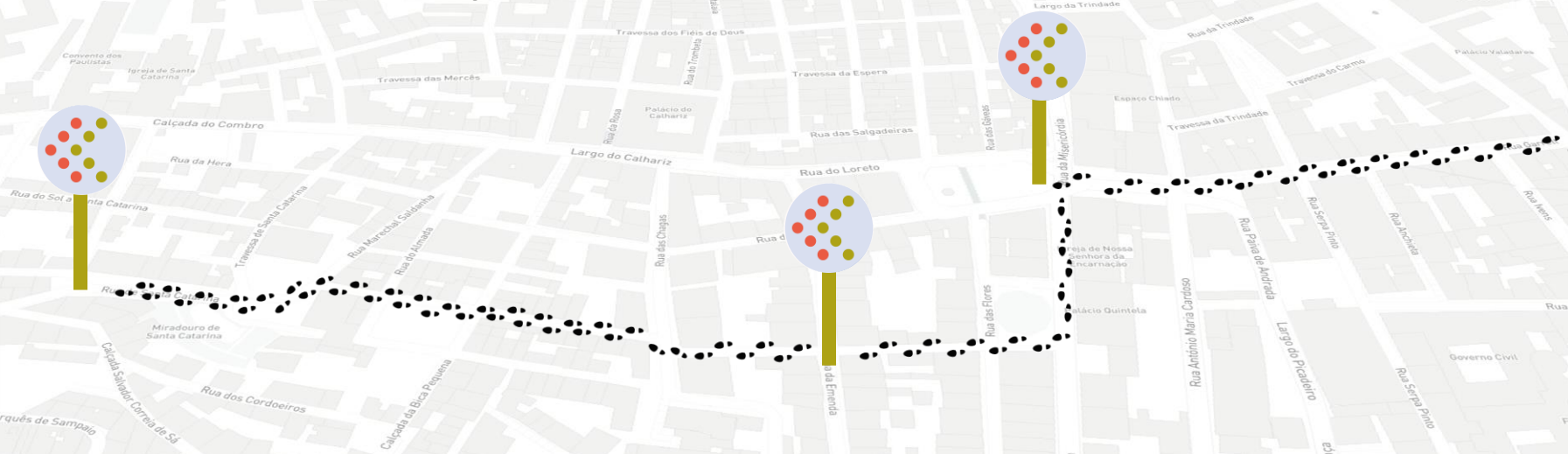
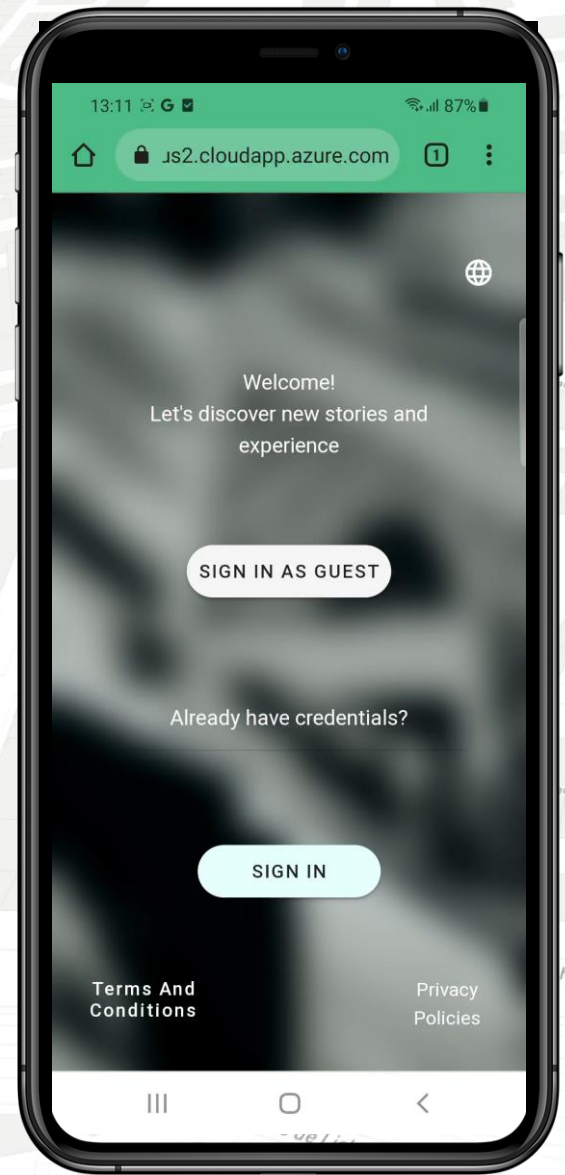
MEMEX

Digital Story Telling

- ✓ Features of the application have been split by the two potential users: **viewers** and **author**.
- ✓ A viewer will be able to interact with limited features of the app → map and list views of stories, navigating, and filtering of stories.
- ✓ An author will be able to create and publish a geolocated story, uploading video, audio and images.
- ✓ An author will be able to add multimedia content to the story



The App: MVP3 Concept (& Status)



See and create stories

Enable a process to come to the story view and story creation with a friendly User Interface. The app allows to:

- Connection with geolocated content
- Linking with audio and videos
- Easy to use even for low-level devices
- Responsive and mobile

Interconnections with the stories

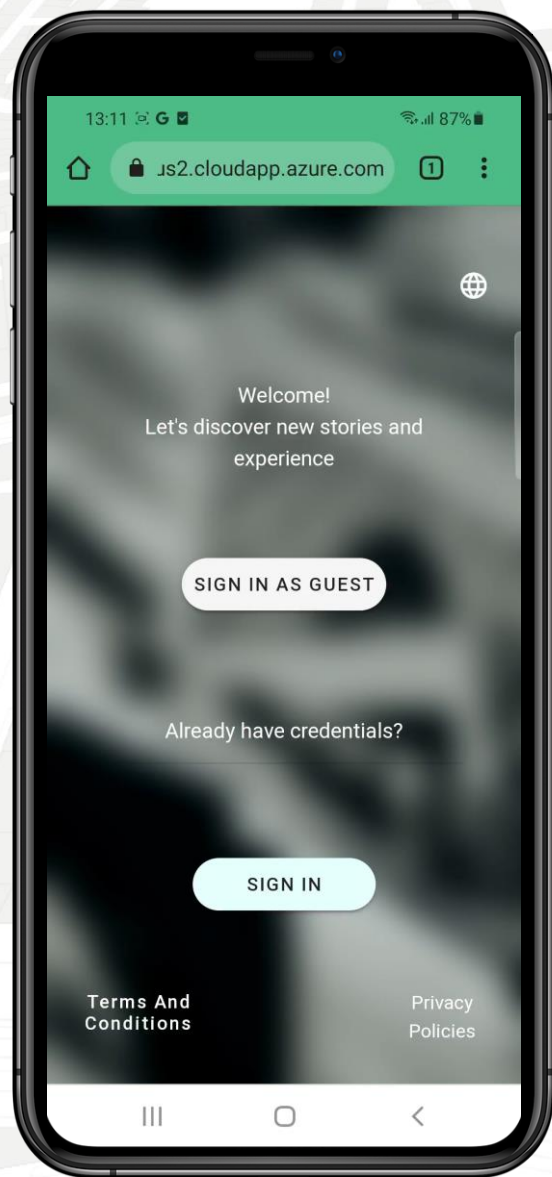
A new component has been added to the MEMEX App to enrich user experience navigation in the app: the **Knowledge Graph (KG)**. It allows to:

- find and include content from **Open Data into stories**
- create a story and **interconnect** it with the stories on the app
- search for **similar stories nearby** and other interesting additional functionalities

Create a group of story (collection/journey)

The third release will be able to introduce the concept of **group of story**, distinguishing between:

- Ordered- Journey
- Unordered-Collection
- Augmented Reality



Pharmacy Museum (Museu da Farmacia)

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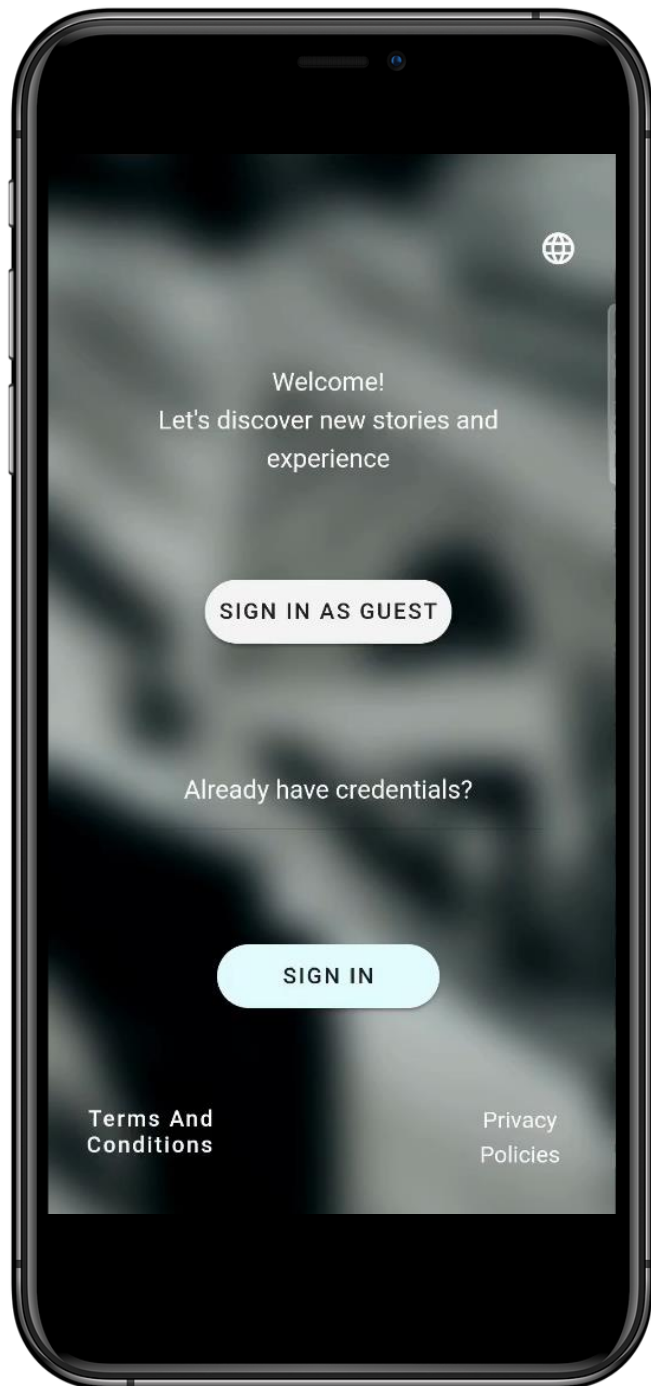
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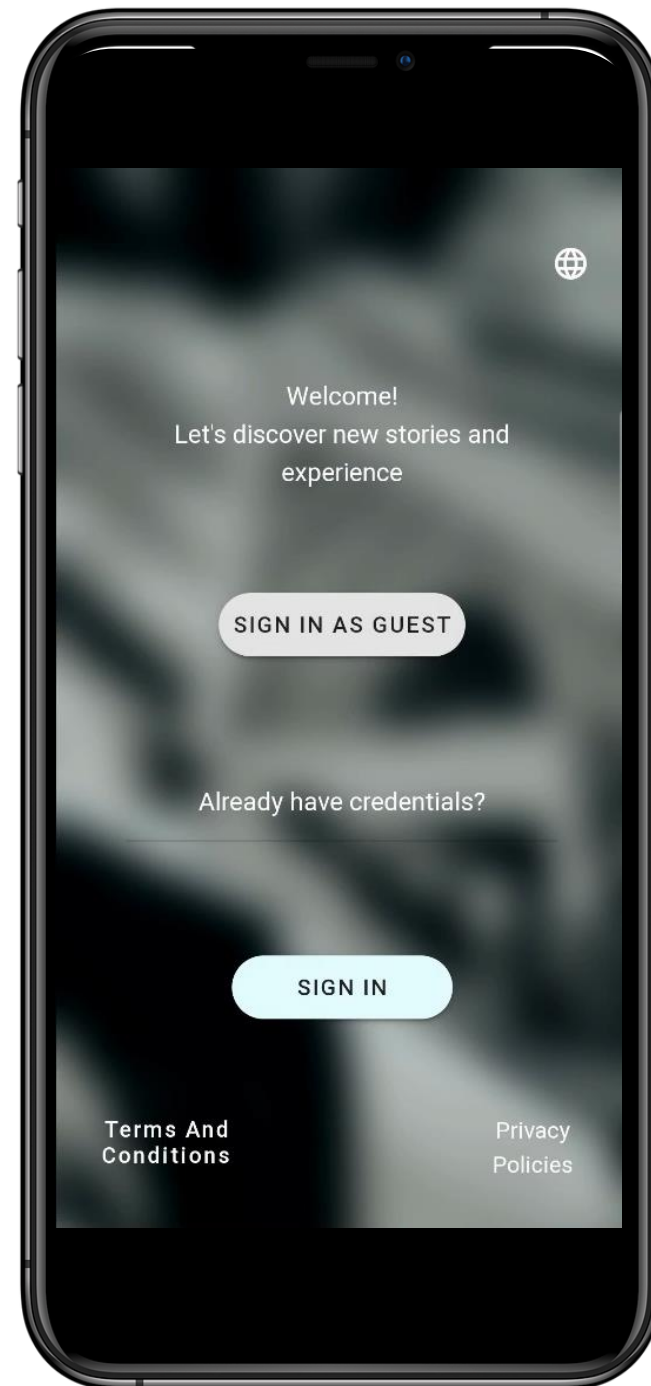
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PARIS



BARCELONA



Augmented Reality



ISTITUTO ITALIANO DI TECNOLOGIA



nòho
creativeknowhow

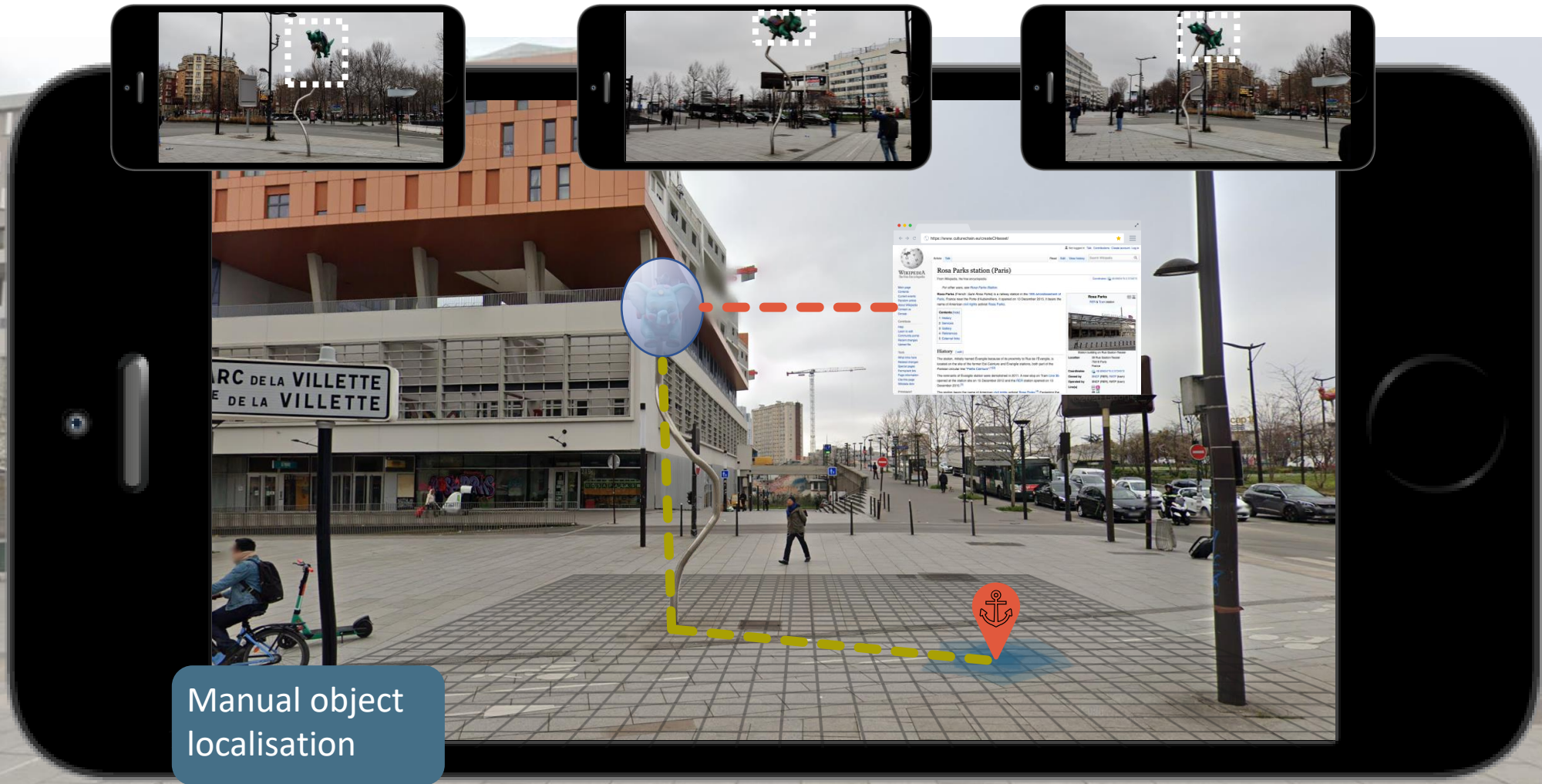


Local placement of object

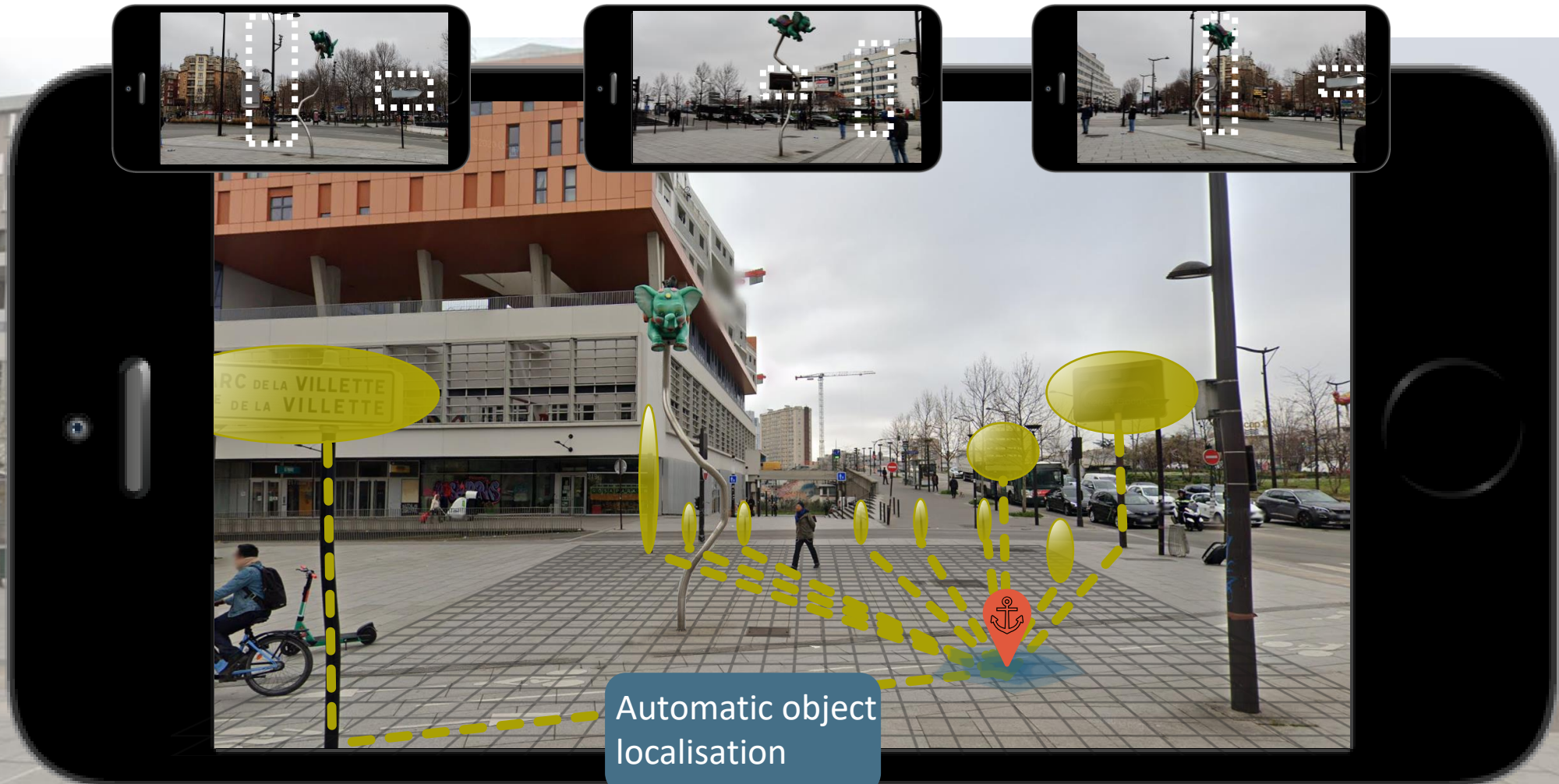
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MEMEX end

Augmented Reality



Augmented Reality



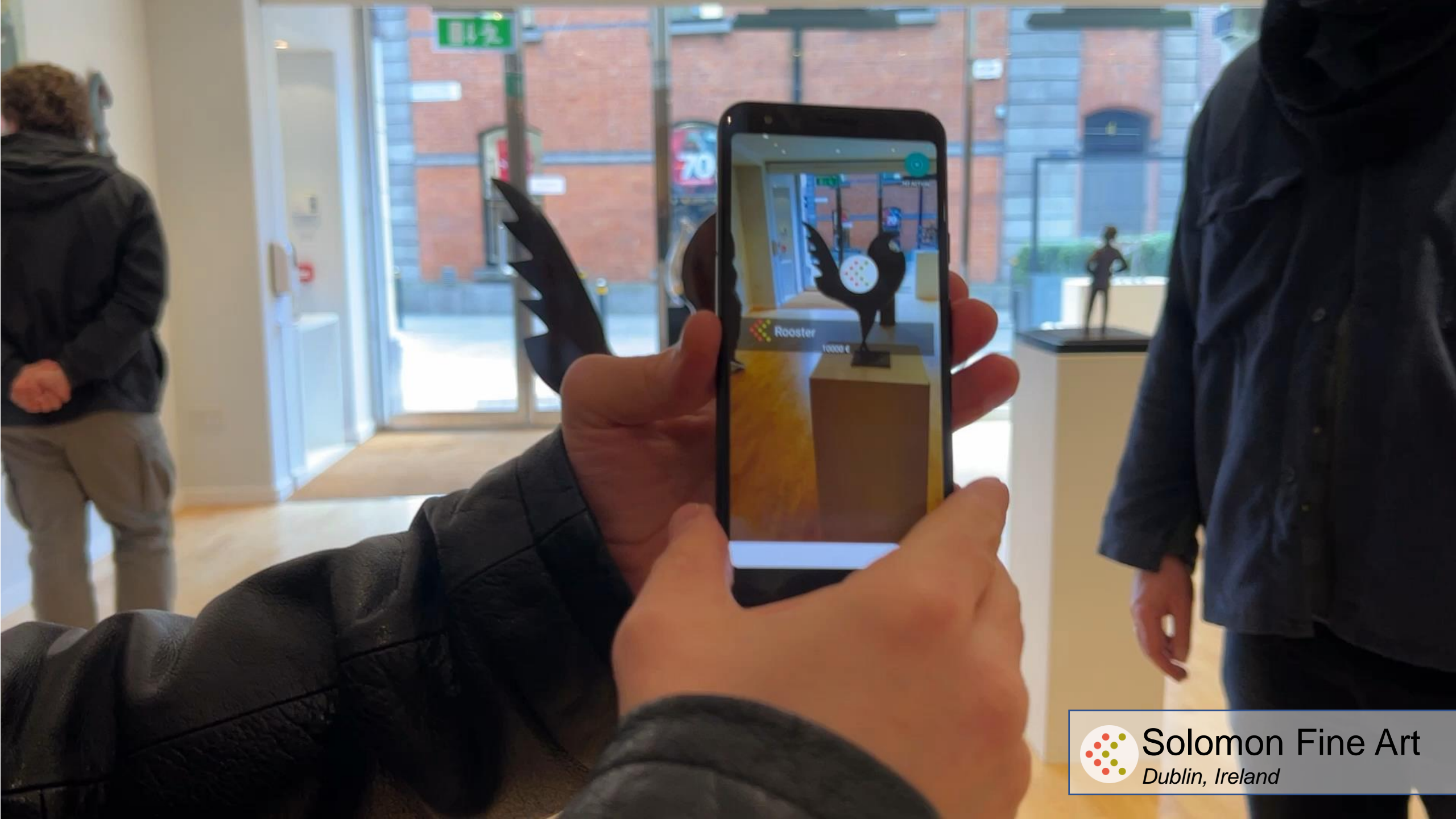
Augmented Reality



Multiple user & Large scale

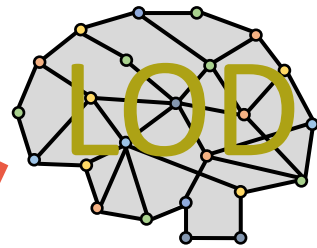
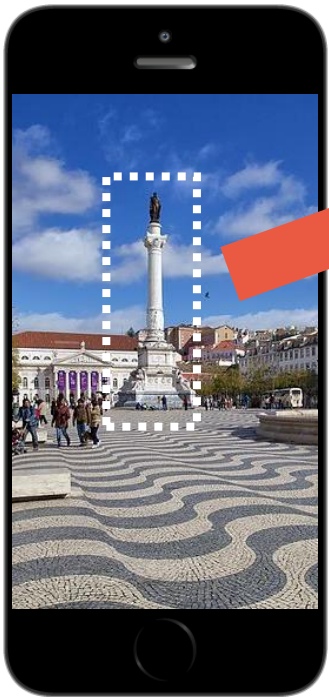
MEMEX start

MEMEX end



Two Perspectives

Curator



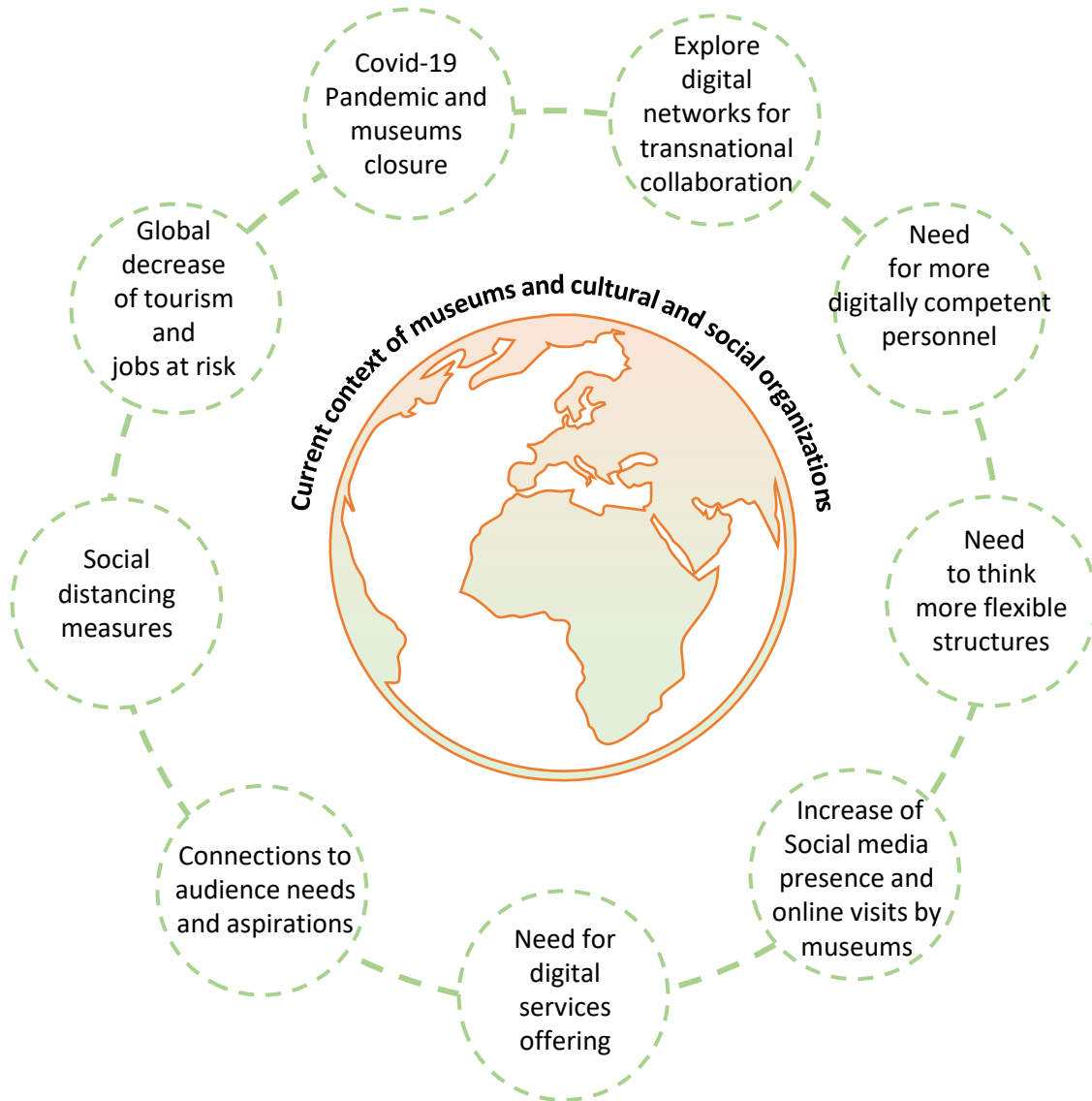
Connect **Tangible** and **intangible objects** to Linked Open Data (LOD) either for **education** or **digital story telling**

Visitor



Explore the world around them **enriched through information and stories**

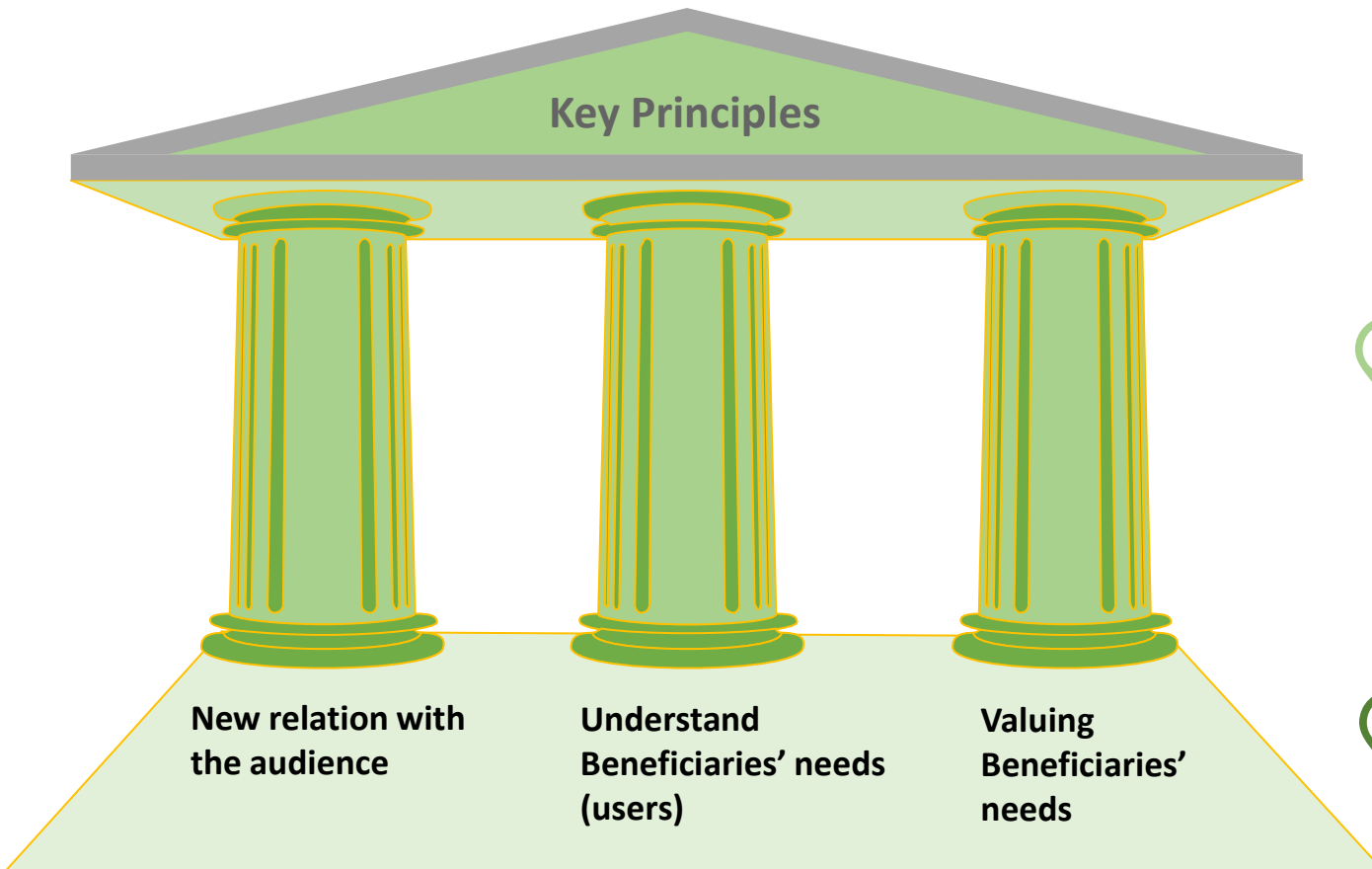
Leading social and cultural organizations through digital transformation



Based on the current experience, what are the main steps **museums** and **social and cultural organizations** should take to strengthen a **long-awaited digital transformation** ?



MEMEX app contribution to overcome the digital divide of social and cultural organizations



NEW RELATION WITH AUDIENCE

- **Digital audience engagement** (more interactive and participatory);
- Enabling beneficiaries (users) to **interact with cultural assets and heritage** through a digital tool at their fingertips;
- Transforming social and cultural organizations into **agile responsive members of their audience**;

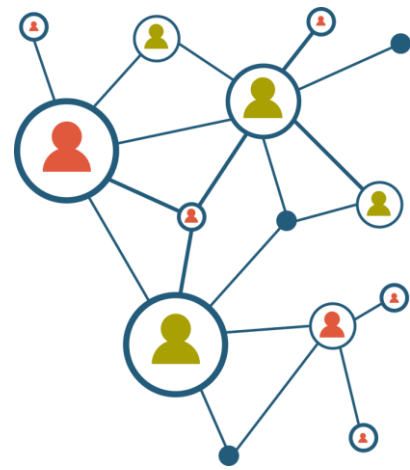
UNDERSTAND BENEFICIARIES' NEEDS

- Increasing **digital literacy on the cultural heritage** of communities at risk of exclusion;
- Create a **stronger and deeper connection** with communities at risk of exclusion **based on collaboration, co-creation, sharing and opening**.

VALUING BENEFICIARIES' NEEDS

- **Beneficiaries needs** have been and will be **valuable for the app development**;
- **Added value**: The **feedback collected** from the audience will feed the development of the app in terms of **sustainability requirements**.

Our next steps ...



- New version of the app prototype and user experience tests (June)
- Final restitution in Paris with walking tour – October 2022
- Final exhibition in the 3 pilots area – September/November 2022
- Final event with policy round table in Barcelona – November 2022
- **Exploitation phase:** Start new pilots with interested stakeholders (e.g. Reggio di Caserta) and secure further funding for the MEMEX platform



Thank you for your attention!

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