

Virtual MultiModal Museum (ViMM)

An International and interdisciplinary co-ordination and support action for a European Virtual Multimodal Museum Strategy



ViMM has received funding from the European Union's Horizon 2020 Programme as Coordination and Support Action, under GA n° 727107

The ViMM project

1. **Analyse and promote** the role of VM as a **strategic resource** for Europe with cultural, social, environmental and economic **value**.
2. **Broaden and intensify discussion** among CH stakeholders and work towards necessary levels of consensus on key technical, legal and policy areas **important for the goals and principles of VM**, bringing together public and private stakeholders in partnership.
3. Define, develop and promote a **unique sustainable platform** engaging a large number of EU CH stakeholders across the whole community.



THE MAIN OBJECTIVES of ViMM

4. Gain **high visibility** through social media, TV, newspapers, publishers, professional associations, conferences and other forms of outreach within Europe and internationally.
5. Establish more accurately the **exact nature** of the key economic **drivers** for VCH and especially for VM and their added **value** for society, their economic impact and multipliers, including the potential for both **public and private** investments.
6. Support the inclusion of VCH and especially of VM in the move towards an **integrated policy** approach to Cultural Heritage for Europe, in readiness for the **European Year of Cultural Heritage** in 2018

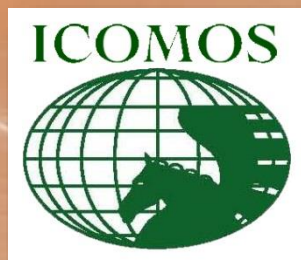


THE MAIN OBJECTIVES of ViMM

7. Articulate **communication** and **consultation** with European and international organisations such as UNESCO, ICOM, ICOMOS, CIPA, ICCROM, Getty, Europeana Foundation, Wikipedia, in order to **gain common understandings** and establish positions of mutual **support**.
8. Define and demonstrate the various **functions and approaches** of VM based on latest **innovations and advances** in the state-of-the-art in VR/AR, why different audiences need them to understand and interact with European CH, why and how VM are necessary to support the accessibility, conservation, use and re-use of CH.



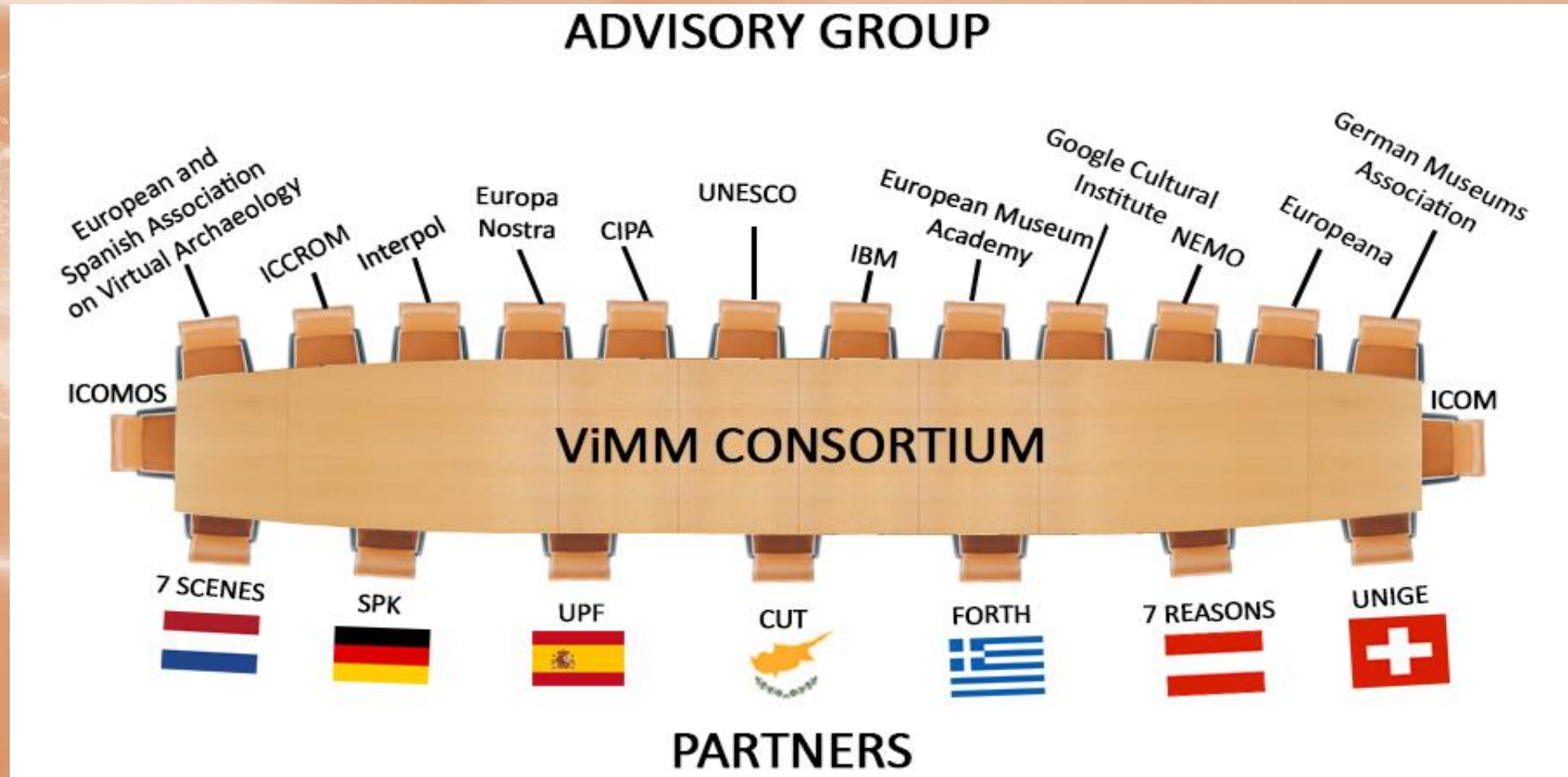
ADVISORY BOARD (Group of Experts)



VIMM
VIRTUAL MULTIMODAL MUSEUM



ViMM's Consortium Proposal



TECHNICAL EXPERTS

Eleanor Fink

*Former Director of the
Getty Information
Institute*

Prof. David Arnold

*Former coordinator of
EU EPOCH and
3D-COFROM projects*

Prof. Dieter Fellner

*Director of the CH
Competenze Center on 3D
Digitisation at Fraunhofer
Instiutute*

Prof. Roko Zarnic

*Adviser on 3D Structural
Analysis in VM
applications*

Prof. Vlatka Rajcic

*Expert on Materials and
Structural Analysis in 3D*

Blair Parkin

*Expert Consultant in
Cultural Parks and
Installations and ICT*



The Vi-MM on line cultural heritage community platform

The ViMM project has created an on-line platform, for the interlinking of the cultural heritage professionals, where already are registered and communicate tens of hundreds of archeologists, museum professionals, cultural technology developers, policy makers.

You will find in the platform an extensive source of information on projects, funding and collaboration opportunities, experts, cases of excellence , news and you can also post your own. The platform promotes directly to the social media, linked in, twitter, facebook, the members' posts.

You will also find the current presentation, as many others of the ViMM workshops and network. It is not necessary to take notes!

vi-mm.eu

- Post and promote your views, news, work, publications, congresses, projects and find those of all members of the community, comment and discuss them on line
- Find, interconnect and talk with experts in the field of digital cultural heritage
- Present your self and your expertise, and promote your work and organizations

Register now!



SECTORS, MODELS, CHALLENGES FOR THE EFFECTIVE GOVERNANCE OF VIRTUAL MULTIMODAL MUSEUMS IN THE DIGITAL WORLD: TOWARDS AN EFFECTIVE DECISION-MAKING PROCESS

Georgios Giannoulis Giannouloupoulos - University Pompeu Fabra
Michael Klein, Juan Torejón – 7th reasons



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The concept

- During 2017, the EU-funded project Virtual Multimodal Museum (<http://www.vi-mm.eu/>) brought together more than 200 experts with very diverse backgrounds (archaeologists, curators, managers, computer scientists, designers, policy makers) to discuss Virtual Multimodal Museums from seven different perspectives. In our presentation, we would like to focus on the results of the thematic area related to their social and economic dimension.



The concept

- The ViMM experts produced a decision-making process scheme organized in 4 stages (idea generation, design, implementation, operation) identifying the relevant decisions, the various internal and external stakeholders, the challenges, and the financial and human resources required in each step.



The method

- ViMM created a team of more than 100 CH experts from various fields who worked together during more than one year on various subjects, in workshops and on-line.
- A team of experts worked under the scientific coordination of UPF on the decision making process, analyzing and questioning a large number of cases of digital applications in order to understand the process, identify weaknesses and improvements, and finally propose a structured decision making process for the Digital Apps integration in cultural heritage .

<https://www.vi-mm.eu/vimm-experts/>



The 4 stages decision making process

Stage 1: Idea / concept creation

Stage 2: Design, study, planning

Stage 3: Implementation of the DH project

Stage 4: Operation (maintenance, evaluation, extension, study of impact in the institution and the economy society)



The 4 stages model

In each stage the experts have identified

A. The stakeholders (internal and external) involved, persons and institutions: directors, managers, curators, personnel, technology providers,, application and operation designers, business plan developers, public authorities, stakeholders of other sectors (tourism, education, businesses etc).



The 4 stages model

In each stage the experts have identified

B. The challenges and the decisions to be made in order to proceed to the next stage and allocate resources in various fields: main objectives, cultural assets selection, technology selection, business and operational plan elaboration, evaluation and internal and external impact measurement.



The 4 stages model

In each stage the experts have identified

C. The adequate level of maturity to be achieved and the resources required.



Overall conclusions Stage 1.

- Lack of standardized processes for the idea/within concept generation within the organization and open participatory procedures to the personnel and the society.
- Lack of resources in time, know-how and incentives for the idea generators, such awards, on line submission procedures of ideas to the decision makers, time for brainstorming



Overall conclusions Stage 2.

- The design and study of the Digital Cultural projects is underestimated in most of the cases and focusing mainly in the design of the development and implementation (stage 3).
- There is insufficient provision for analytical operational and business plans, in medium and long term, maintenance and operational costs, updates, adaptations and extensions, raising risks and final costs for the stakeholders.
- The organizations lack know-how expertise, and does not dedicate sufficient resources in the design within the overall project.



Overall conclusions Stage 3. Implementation

- The implementation (development of the application, digitization, debugging) is considered THE PROJECT. Most of effort and resources are dedicated to this stage.
- However important elements and information of expertise are missing in the monitoring by the stakeholders while back and forward events, due to insufficient design and planning are in many cases raising the costs and reduce effectiveness .



Overall conclusions Stage 4. Operation

The operation is the stage where all previously overlooked issues appear:

- Meeting with the needs of the public and the scientific objectives at the same time.
- Costs of maintenance and lifetime of the digital app expectation and necessary investment of updates
- Lack of resources and trained personnel to maintain and operate.



Overall conclusions Stage 4. Operation

- Insufficient medium and long term evaluation and impact studies, to the organization, the cultural assets themselves, and the society and economy, in order to justify the investment and attract more funding and resources



ViMM propositions and tools

- a. Identify clearly the decision maker in each stage, and establish standardized procedures, maturity standards , and adequate stakeholders involvement in order to proceed in the next stage
- b. Allocate adequate resources (time, effort, funding, expertise) in the stage 1, 2, and 4 (in longer term base). This is expected to reduce very significantly the cost and effort of the stage 3, boost creativity, selection of adequate technologies following the cultural and operational and business objectives, and not adapt the objectives to the technology in order to enhance sustainability.



ViMM Decision Making tool

- The detailed scheme of decisions, stakeholders, and challenges in each stage will be available in ViMM platform specific part, soon.
- The tool will also provide the possibility to the registered members of the platform to link their personal profiles and posts to precise points of the process, for example :

stage 2: technology design and selection, suggesting the offer of information and services to other users

stage 4: evaluation and impact study, educational aspects etc.

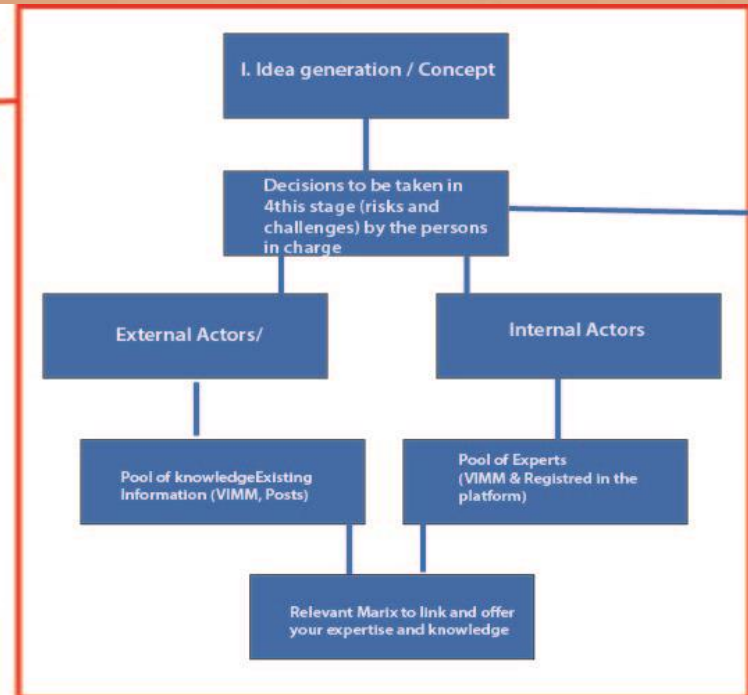


I. Idea generation / Concept

II. Elaboration of the design study, planning

III. Development and implementation

IV. Operation and maintenance



Negotiate and accept the detailed objectives of the design including the level of detail of the deliverables of the study.
-All the major decisions in a step by step design to be taken by the project owner in collaboration with the designers in the following order:
-A. Cultural Assets to be developed through digital application (tangible, intangible) and operational objectives and business plan. Taking into account
-A1. Various possibilities of technological solutions

and respective costs and requirements
-A2. Cultural, added value of each technological solution
-A3. Operational added value of each solution
-A4. Marketing and business added value of each solution
-A5. Other social benefits of each solution outside the organization
-A6. Other economic benefits and returns of each solution outside the organization and returns



Stage 1 : concept idea generation

- Description

Decision Making Tool

I. Ideageneration / ConceptII. Elaboration of the design, study, planningIII. Development and implementationIV. Operation and maintenance

Ideageneration / concept

1 General Objectives

2 Asset Valorisation

3 Technologies

4 Research and Design Budget

5 Implementation budget

6 Done

The concept should be brought at a level including: overall objectives on specific cultural assets valorization and digital technology idea, initial estimate budget, estimate time frame of implementation and operation, main challenges and risks, description of the study and design needs.

General Objectives *

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Stage 2 : Design and planning

- Design

Decision Making Tool

I. Ideageneration / ConceptII. Elaboration of the design, study, planningIII. Development and implementationIV. Operation and maintenance

Business PlanCurationLevel of AnalysisMarket Issues

Business Plan


Detailed operational plan including, organizational structure, IPR issues, business plan, marketing and promotion plan and relevant costs and efforts, income and expenses of operation, requirements of resources and skills for the operation, the update and the maintenance in larger time, draft maintenance and update long term contracts with the technology developers including liability and guarantees

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
Experts



Eleftheria Paliou

Archaeoinformatics (Digital and Computational Archaeology)


[Homepage](#)



Elena Lagoudi

Museum collections, Digital services and infrastructures for GLAMs, Museum documentation, Mobile services for museums

[Homepage](#)





GRIL Joseph


Mechanical modeling - Conservation of wooden objects - Influence of microclimate

[Homepage](#)

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Stage 3 : Implementation

- Des

Decision Making Tool

I. Ideageneration / Concept

II. Elaboration of the design, study, planning

III. Development and implementation

IV. Operation and maintenance

Business Plan

Curation

Level of Analysis

Market Issues

Business Plan


Detailed operational plan including, organizational structure, IPR issues, business plan, marketing and promotion plan and relevant costs and efforts, income and expenses of operation, requirements of resources and skills for the operation, the update and the maintenance in larger time, draft maintenance and update long term contracts with the technology developers including liability and guarantees

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
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Stage 4 : Operation –evaluation -maintenance

- Desc

Decision Making Tool

I. Ideageneration / Concept

II. Elaboration of the design, study, planning

III. Development and implementation

IV. Operation and maintenance

Maintenance Issues

Operation Monitoring

Operational Financial Resources

Time and Management Process

Updating: Hard / Software

Maintenance Issues


Income/expenses balance follow up. Income management and provisions for maintenance updating. Marketing and promotion planning and adaptation (continuous investment)
Measure and prove the direct and indirect economic and social impact and transform it into financial return to the digital application owner.

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
Experts




Milica Tapavički-Ilić
- Archaeology, - Celtic Era, -
Roman Era, - Experimental
Archaeology, - Museums, - Open-
air museums.
[Homepage](#)




Nikos Grammalidis
Intangible cultural heritage,
Machine learning,
feature/metadata extraction, 3-D
visualization
[Homepage](#)



Spyros Vosinakis
Virtual Reality, Virtual Museums,
Human-Computer Interaction.
[Homepage](#)



Stefanie Wefers
Knowledge representations, 3D /
spectral data
[Homepage](#)



The on-line ViMM support tool

<https://dmt.vi-mm.eu/>



The Vi-MM on line cultural heritage community platform

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