



Online virtual exhibitions Guidelines for realisation

Maria Teresa Natale

Istituto centrale per il catalogo unico delle biblioteche

Firenze, 11 May 2012

INDICATE Workshop





- One of the main goals of public and private cultural institutions (GLAMs) is the promotion and dissemination of knowledge.
- They accomplish their mission thanks to knowledge dissemination tools that include, among others, temporary and permanent exhibitions and performances that follow codified models, whose goal is to expose citizens to the national and international cultural and artistic heritage.



The meeting between the languages and methods of traditional cultural promotion (non-virtual exhibitions) and the promotion and dissemination of knowledge through web-based methods (online virtual exhibitions) have made it necessary to draft shared guidelines and recommendations that encourage the use of the web and maximize its potential.



These guidelines, edited by MiBAC, aims:

- to illustrate the state of the art in online virtual exhibitions, both on the basis of the actual experience accrued by various Italian institutes and the observation and analysis of international products
- to clarify some concepts that in literature are not yet fully codified, and give some recommendations and a tool kit to institutions who want to realise projects.

This MiBAC initiative has been promoted by

Istituto centrale per il catalogo unico delle biblioteche italiane (ICCU) http://www.iccu.sbn.it

- manages the online catalogue of the Italian libraries and the interlibrary loan and document delivery National services
- develops standards guidelines for the cataloguing and digitization.

Istituto centrale per gli archivi (ICAR) -

http://www.icar.beniculturali.it/

- develops plans and programs for the archival description and the development and interoperability among information systems
- promotes the knowledge and application of descriptive standards and technology.

Osservatorio tecnologico per i beni e le attività culturali (OTEBAC) http://www.otebac.it

 provides advisory services, monitoring, and training, supporting cultural institutions in the creation and maintenance of quality digital cultural applications



A cross-domain working group

Tatiana Anderlucci (Redazione Via Francigena)

Viviana Carini (Redazione Via Francigena)

Laura Ciancio (ICCU)

Alfredo Corrao (MiBAC)

Alfredo Esposito (Direzione generale Beni librari)

Marina Giannetto (Istituto centrale per gli archivi)

Tiziana Fabris (Istituto centrale per gli archivi))

Giuliano Granati (Istituto centrale per gli archivi)

Valentina Grippo (Redazione Via Francigena)

Cristina Magliano (ICCU)

Adriana Martinoli (Direzione generale Beni librari)

Marina Morena (Archivio di Stato di Roma)

Maria Teresa Natale (ICCU - OTEBAC)

Elisabetta Pagani (Redazione Internet Culturale)

Paola Panaccio (Istituto centrale per gli archivi)

Elisa Sciotti (ICCU)

Priscilla Sermonti (Redazione Via Francigena)

Giuliana Zagra (Biblioteca nazionale centrale di Roma)





1. Concepts and definitions

- 1.1 Exposition, exhibition
- 1.2 Online virtual exhibition
- 1.2.1 Thematic route
 - 1.2.2 Digital item
 - 1.2.3 Hypertext, hypermedia, multimediality, interactivity
 - 1.2.4 Information architecture



Glossary

- The term **exposition**, in its broadest sense, indicates the rational process through which one attempts to divulge a concept or topic by explaining its logical content or linking it to other concepts or topics that help highlight its meaning
- The term **exhibition** indicate an event with a specific venue and time, during which the public can enjoy a series of objects, paper and/or multimedia documents, books, paintings, sculptures, and other items, related to one another and organized according to logical, thematic, spatial, historic, and/or authorial criteria, and made accessible either permanently or temporarily, through one or more narrative routes, with scientific, didactic, and/or promotional goals.







Glossary

Cultural institutions are increasingly recurring to exhibitions that fall **outside the traditional space/time parameters**, and are instead staged on IT platforms **accessible via the web**.

These are online virtual exhibitions.





Glossary

Current debate: digital exhibition vs. virtual exhibition

Virtual exhibitions: to be used mainly in the case of 3D reconstructions in which there is actually also a virtualization environment in which the works are located.

Digital exhibitions: the object is not faced with any kind of reconstruction, the work of art is approached "individually", included in a "path" that performs logical combination of materials based on different criteria: subject, author, time, technicalities, ...



An online virtual/digital exhibition is

- a hypermedia collection accessible via the web, and made up of digital items which are:
- linked together by a common threat, an inter-disciplinary topic, a concept, an idea, an anniversary, a special event, or a physical person
- displayed in 2D or 3D
- occasionally memorised in distributed networks
- made accessible through the potential provided by modern technology, thanks to a system architecture designed to provide user-centred, absorbing experiences
- dynamic products that can offer services and be updated periodically.



- Virtual exhibitions are often generated by real events, even though they may result in products that are autonomous, due to the web language they use.
- Online virtual exhibitions can be staged with more or less sophisticated IT tools, depending on the degree of complexity and the goals in question.





 The most basic virtual exhibition is an advertising showcase for the real event, included in the website.

It generally includes a series of informative pages and a photo gallery featuring the exhibition's highlights.

These are often part of a broader set of coordinated marketing actions, whose main goal is to increase the number of visitors to the real exhibition.



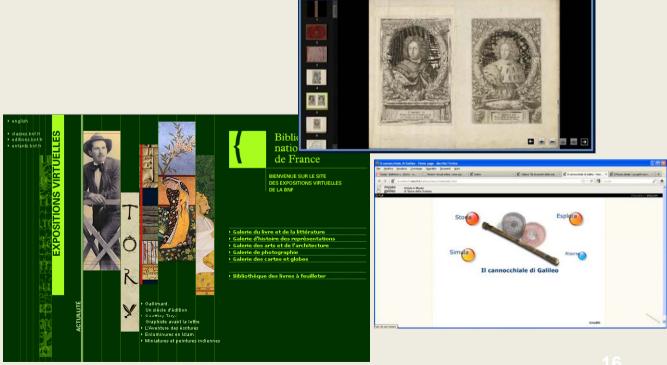


One step up on the complexity ladder are virtual visits
to real exhibitions, based on a specific web project aiming
to depict the exhibition's actual arrangements, and
allowing users to approximate as much as possible a real
visit, enhanced at times by information pages. Sometimes
users need to download specific software in order to access
this service.





 The most sophisticated are complex virtual/digital exhibitions making full use of the conceptual, instrumental, and linguistic tools provided by new technologies, and using the full extent of their potential.



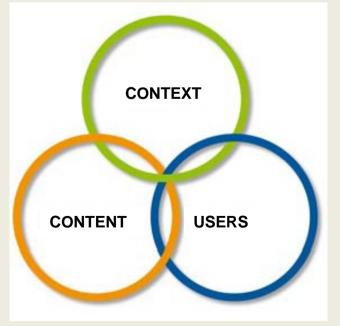


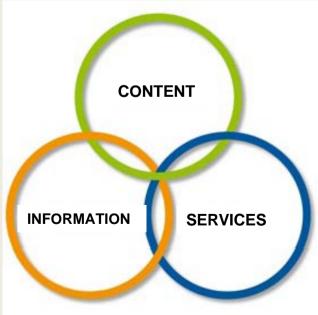
- In summary, a collection of digital items, in and of itself, does not constitute a material or virtual exhibition. It is only when the items are carefully selected to illustrate a topic, and are tied together forming a narrative or a logical itinerary, that they constitute an exhibition.
- Online virtual/digital exhibitions, independently of degree of sophistication of the technology used, can and must be put together in such a way that they can provide alternative experiences to the real event, which can involve the user in a process of discovery, knowledge acquisition, and learning.



Any virtual exhibition must rest upon an **information architecture** that makes up the logical and semantic organizational structure of the project's information, content, processes and functionality.

Information architecture is at the heart of any interaction design project.







During the conception phase, the contents of a virtual exhibition can be aggregated according to thematic relations, which may be more or less prevalent and non-exclusive depending on the objectives to be pursued, such as:

Spatial aggregation: objects are connected by real or reconstructed spatial links (e.g. geographic, environmental, urban, housing, etc.)

Temporal aggregation: objects are connected by chronological links (e.g. historical period, event, celebration, phase, etc.)

Typological aggregation: objects are connected by their typology (e.g. style, manufacturing technique, material, production, etc.)

Comparative aggregation: objects are aggregated on the basis of links arising out of the comparison with other models, thus creating a network of similar contents (e.g. comparisons between civilizations, roles, etc.).

In addition, there are aggregations which take into account the target audience and the relationship with users:

Functional aggregation: function and/or goal which the exhibition can help meet (for example, target users: schools for the disabled, university students ... or educational/didactic purposes)

Behavioural aggregation: when the exhibition encourages and develops behaviours that can attract other behaviours. This is the case with regards to interactions between multiple communities of users and/or visitors, which bring about broader relationships and new developments (e.g. interactive and community areas, Web 2.0 features).



2. PRODUCTION PROCESS OF A VIRTUAL EXHIBITION

- 2.1. Conception
 - 2.1.1 Brainstorming
 - 2.1.2 Thematic relations
 - 2.1.3 Virtual exhibitions and thematic routes for educational purposes
- 2.2. From planning to creation
 - 2.2.1. The project team
 - 2.2.2. Selection of digital resources
 - 2.2.3 Definition of the architecture: contents, information, and services
 - 2.2.4 The technology to be used
 - 2.2.4.1 Mobile devices
 - 2.2.4.2 Augmented reality
 - 2.2.5 The budget
 - 2.2.6 Definition of operating phases and timeline
- 2.3 Testing, publication, communication, and dissemination
 - 2.3.1 Testing and publication
 - 2.3.2. Communication and dissemination
 - 2.3.2.1 Traditional communication tools
 - 2.3.2.2 Social media marketing
- 2.4 Updating, maintenance, and conservation



3. EIGHTEEN RECOMMENDATIONS AND ONE PIECE OF ADVICE

4. TOOL KIT

- 4.1 Graphic design
- 4.2 Text style
- 4.3 Multi-media resources
- 4.3.1 Still Images
- 4.3.1.1 OCR: text conversion
- 4.3.2 Audio
- 4.3.3 Video
- 4.3.4 3D
 - 4.3.4.1 Computer graphics
 - 4.3.4.2 Immersive photography
 - 4.3.4.3 Anaglyph images
- 4.4 Copyright, re-use of content, and access modalities



Benchmarking Virtual exhibitions/Thematic routes

Responsible institution, country		
	_ • 3D	360° images
Title Virtual exhibition/Thematic route	Captions	Other (specify)
URL	Information on the real exhibition	Multilingualism (if yes, list languages)
Realisation Date	Other (specify)	Audiences
Equivalent real exhibition	Apparata	General public
Cathegory	Indexes (places, names ecc.)	• Researchers
Virtual exhibition	Bibliographies	• Schools
	Webliographies	- Children
Thematic Route	• Chronologies	- Other (specify)
Other (specify)	Sources Glossaries	
Technical features	Pubblications and catalogues	Usability quality (high, middle, scarce)
Static website	Other (specify)	Accessibility quality (high, middle, scarce)
• CMS	Services	Text quality (high, middle, scarce)
Special software	Educational packages	Images quality (high, middle, scarce)
Simple Search functionalities	· Games	Captions quality (high, middle, scarce)
Advanced search functionalities	Ticketing	Design quality (high, middle, scarce)
	Bookshop	Hypertext (Very much, much, few, none))
Query to databases		User generated content
Content area	Other (specify) Cover	User generated content Sharing with social networks (Facebook, You Tube, Twitter, etc.)
Content area • Texts	Other (specify) Cover	Sharing with social networks (Facebook, You Tube, Twitter, etc.)
Content area • Texts • Cards	Other (specify) Cover Other information (only if referring to the exhibition)	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images
Content area Texts Cards Index	Other (specify) Cover Other information (only if referring to the exhibition) Credits	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version
Content area • Texts • Cards	Other (specify) Cover Other information (only if referring to the exhibition)	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images
Content area Texts Cards Index	Other (specify) Cover Other information (only if referring to the exhibition) Credits Info on technologies Terms of use Copyright (specify)	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version
Content area Texts Cards Index Image galleries Interview	Other (specify) Cover Other information (only if referring to the exhibition) Credits Info on technologies Terms of use	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version Short description
Content area Texts Cards Index Image galleries Interview Storytelling	Other (specify) Cover Other information (only if referring to the exhibition) Credits Info on technologies Terms of use Copyright (specify)	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version
Content area Texts Cards Index Image galleries Interview Storytelling Videos	Other (specify) Cover Other information (only if referring to the exhibition) Credits Info on technologies Terms of use Copyright (specify) Other (specify)	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version Short description
Content area Texts Cards Index Image galleries Interview Storytelling Videos Animations	Other (specify) Cover Other information (only if referring to the exhibition) Credits Info on technologies Terms of use Copyright (specify) Other (specify) Software Timeline Tag cloud	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version Short description Positive feedback
Content area Texts Cards Index Image galleries Interview Storytelling Videos Animations Speeches recordings	Other (specify) Cover Other information (only if referring to the exhibition) Credits Info on technologies Terms of use Copyright (specify) Other (specify) Software Timeline Tag cloud Tagging	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version Short description Positive feedback Negative feedback
Content area Texts Cards Index Image galleries Interview Storytelling Videos Animations Speeches recordings Music recordings	Other (specify) Cover Other information (only if referring to the exhibition) Credits Info on technologies Terms of use Copyright (specify) Other (specify) Software Timeline Tag cloud Tagging Geotagging	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version Short description Positive feedback Negative feedback Consultaion date
Content area Texts Cards Index Image galleries Interview Storytelling Videos Animations Speeches recordings Music recordings Documentations (newspapers articles, etc.)	Other (specify) Cover Other information (only if referring to the exhibition) Credits Info on technologies Terms of use Copyright (specify) Other (specify) Software Timeline Tag cloud Tagging Geotagging Slideshow	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version Short description Positive feedback Negative feedback Consultaion date Your name
Content area Texts Cards Index Image galleries Interview Storytelling Videos Animations Speeches recordings Music recordings	Other (specify) Cover Other information (only if referring to the exhibition) Credits Info on technologies Terms of use Copyright (specify) Other (specify) Software Timeline Tag cloud Tagging Geotagging	Sharing with social networks (Facebook, You Tube, Twitter, etc.) Possibility of downloading high resolution images Mobile version Short description Positive feedback Negative feedback Consultaion date



Advantages of virtual exhibitions

- help **promote** the cultural heritage preserved by the institution
- are a learning tool that helps enhance knowledge
- can make accessible an **amount** of documents and items that is much greater than what any material exhibition could ever manage to display
- can make accessible to the public the most
 valuable works and documents, without putting
 the national and international cultural heritage at risk



Advantages of virtual exhibitions

- help users enjoy documents and works that may not be accessible otherwise
- make it possible to view parts and details of works that could not otherwise be seen, not even through the direct observation of the original
- remain accessible over time, since they are not limited to the duration of the actual event
- can almost always be "visited" free of charge by users from all over the world, who may not be able to visit the actual exhibition



Advantages of virtual exhibitions

- they are dynamic, since they can be modified even after they have been changed, both with regards to planning aspects and to their activities and contents
- can be enhanced by the contributions of users
- they can be staged even on limited budgets, and are less expensive that actual exhibitions
- they can serve as an online archive for information related to the material exhibition
- they can have positive repercussions on the tourism industry.



MOVIO project

MOVIO project (18 months), funded by Fondazione Telecom Italia, intends to realise a kit to build online virtual exhibitions online.

Through it, Italian cultural institutions will be able to highlight masterpieces of their collections, as well as less known or "not visible" works of art.

An example of public-private partnership



MOVIO project

The kit will consist of:

- an open source CMS for the creation of online virtual exhibitions
- the equivalent version for mobiles
 (iPhone, Android for smartphones and iPad)
- the **version of App** for popular mobile platforms (iMovio) online tutorials and training

The kit will put in practice and validate what declared in the guidelines

INDICATE Virtual Exhibitions Case Study

The case study, through a survey among partners and the analyses of current practices investigates connections between virtual/digital exhibitions and e-infrastructures.

The results will be made available in a report targeted to memory institutions, illustrating advantages for **institutions**, **curators** and **final users**.

Many opportunities:

Storage

Band Efficiency

Supercomputing

Virtual communities (shared tools and cooperation projects)

Educational services

Virtual performances







Thanks! Maria Teresa Natale

Istituto centrale per il catalogo unico delle biblioteche italiane otebac@beniculturali.it mariateresa.natale@gmail.com

