AthenaPlus
Digital storytelling for DCH
Innovative tools and services

Maria Teresa Natale
(ICCU - AthenaPlus technical coordinator)

Museums and the Web Florence 2014

AthenaPlus is a CIP best practice network started in March 2013 and ending in August 2015. The consortium is composed by 40 partners from 21 Member States countries.

The principal objectives of the AthenaPlus project are to:

▪**Contribute** more than 3.6 millions metadata records to Europeana, from both the public and private sectors, focusing mainly on museums content, with key cultural stakeholders (ministries and responsible government agencies, libraries, archives, leading research centres, SMEs);

▪**Improve** search, retrieval and re-use of Europeana's content, bettering multilingual terminology management, SKOS export and publication tool/API for Content Providers;

▪**Experiment** with enriched metadata their re-use adapted for users with different needs (tourists, schools, scholars) by means of tools that support the development of virtual exhibitions, tourist and didactic applications, to be integrated into Europeana repositories and the repositories of national aggregators or individual Content Providers.

3 work packages lead specific activities on digital storytelling

- **Creative applications for the re-use of cultural resources (WP5)**: analyse, define, configure and develop the software components necessary to enrich metadata for a creative use of the content collected by the AthenaPlus project. *Led by META with support of PACKED*

- **Pilots for testing the creative use of cultural contents (WP6)**: evaluate and test the tools and solutions designed and developed by WP5. *Led by i2Cat supported by ICIMSS*

- **Awareness and dissemination (WP7)**: make European museums and other cultural institutions aware of the benefits of making available their digital contents through Europeana, identify new best practices, and disseminate the results achieved to a broad audience. *led by SPK and MICHAEL*

1 workshop on digital storytelling for mediation and valorisation of cultural heritage
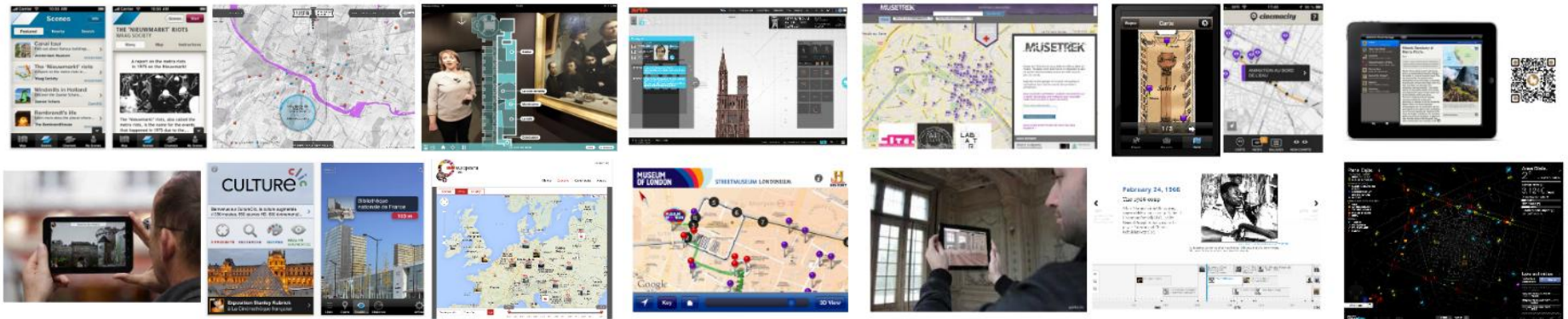
- Organised by MICHAEL CULTURE in Berlin, 9 October 2013
- Project mapping: state of the art of digital storytelling for mediation and valorisation of cultural heritage
- Project presentation: tools and user services

3 deliverables related to creative applications have been successfully submitted to the Commission since the beginning of the project

- **Report on the user needs and requirements (D5.1)**: information on user needs and requirements in relation to the creative applications for the (re)use of digital cultural heritage content that will be developed in the AthenaPlus WP5. *Coordinated by ICCU and PACKED*

- **Report on existing tools and devices related to narrative approaches and requirement functionalities + Addendum (D5.2)**: overview of existing tools and applications that may serve as examples for the development of the creative applications for the (re)use of digital cultural heritage content that will be developed in the AthenaPlus WP5. *Coordinated by Dédale and PACKED*

- **Analysis, scenarios use cases, opportunities of innovative services for DCH, and future development (D7.2)**: synthesis of MICHAEL CULTURE workshop and recommendations on digital storytelling for DCH.

- **Context and implications of digital storytelling for cultural heritage**

- **State of the art and implications on digital data and tools**

- **Presentation of relevant tools**

- **Project mapping: 100 digital storytelling services for users**

- **Table analysis with classification of the digital storytelling services**
  Storytelling can be interactive / collaborative / locative / transmedia / immersive / generative

- **Specific recommendations**

Study on digital storytelling for DCH
Presentation

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Access to cultural heritage
networks for Europeana
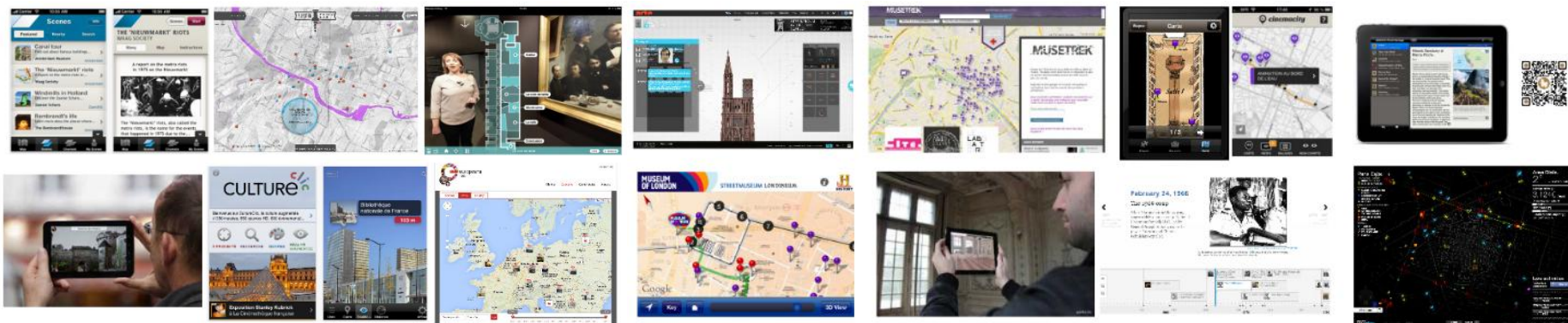
Explore the possibilities of Europeana content for digital storytelling in many domains

•Curatorship / Research / Education / Tourism / Genealogy / University teaching / Cultural mediation

Provide examples for the development of creative applications

Serve pilot actions (WP6)

•Digital storytelling / Virtual exhibitions / Educationnal use / GIS applications

MVIO MOSTRE VIRTUALI ONLINE

Tool for the creation of
virtual exhibitions and
cultural tourism routes

URBAN EXPLORE

Digital mobile device
for enriched urban
promenades

4 key trends about user experience:

Make users active for a new vision of cultural heritage

•Services are based on the personalization of the user experience, engagement and participation by "User-Generated Content".

•Create tools for structuration and reuse of this important volume of data and metadata from users

•Give a new vision of museum collection, digital heritage objects, art works…

Design immersive and responsive devices for a complete user experience

•Immersive audio and video guides for tourism or museums

•Interactive maps getting historic information out of a given place

•Transmedia web documentary with a story adapted and declined on several medias accompany users all along their visit experience with a lot of documents, resources and information.

•The challenge is the contextualization and personalization of resources in order to present to the user digital content which makes sense for him/her in a given context.

Create mobile and generative storytelling devices for a real enriched visit space

•The user does not have to click on his device to receive content

•Device just "listens" to his behaviour and translates in real time this pattern in a story stream.

•With the geolocated content, the user can interact with the content of the story by changing and adjusting his/her trajectory and / or behaviour.

Propose new user experience based on serious games

•Convergence of DCH and gaming enable the development of edutainment services as new mediation forms.

•Increase the attractiveness of cultural content and give the opportunity to tell original stories with interactivity based on playful logic.

Recommendations are made on the following key issues

▪**Cultural heritage mediation** │ New mediation forms based on digital storytelling potential

▪**Strategic issues and positioning** │ Strategic watch on innovation, emerging technologies and key trends

▪**Data and metadata** │ Creation and management of data and metadata dedicated to storytelling

▪**Tool kit** │ Efficient tools to manage advanced storytelling

▪**Project methodology** │ Think like a laboratory to design your storytelling services

▪**IPR management** │ Ask the good questions at the right time

▪**Communication and dissemination** │ Create public interest and keep your project alive

Study on digital storytelling for DCH
Recommendations # Cultural heritage mediation

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Promote cultural heritage on every day life

•With mobile technologies every day life and the real world become two powerful elements to tell stories.

•We have to build storytelling projects which accompany the visitor in his daily life.

•We have to be able to reach and to interest the general public beyond the museum space, out of the cultural place.

Example: 7 scenes apps

Create an enriched visit space as a new learning environment

• Create location-based stories: public space is a privileged environment for learning and cultural heritage mediation.

• We have to use the city as a new learning environment able to ensure the promotion and valorisation of knowledge and culture.

Example: Streetmuseum-Londinium app

# Support the visitor before, during and after the visit

• Enrich the visitor's experience cycle by offering him new action and participation capacities at every time of his visit.
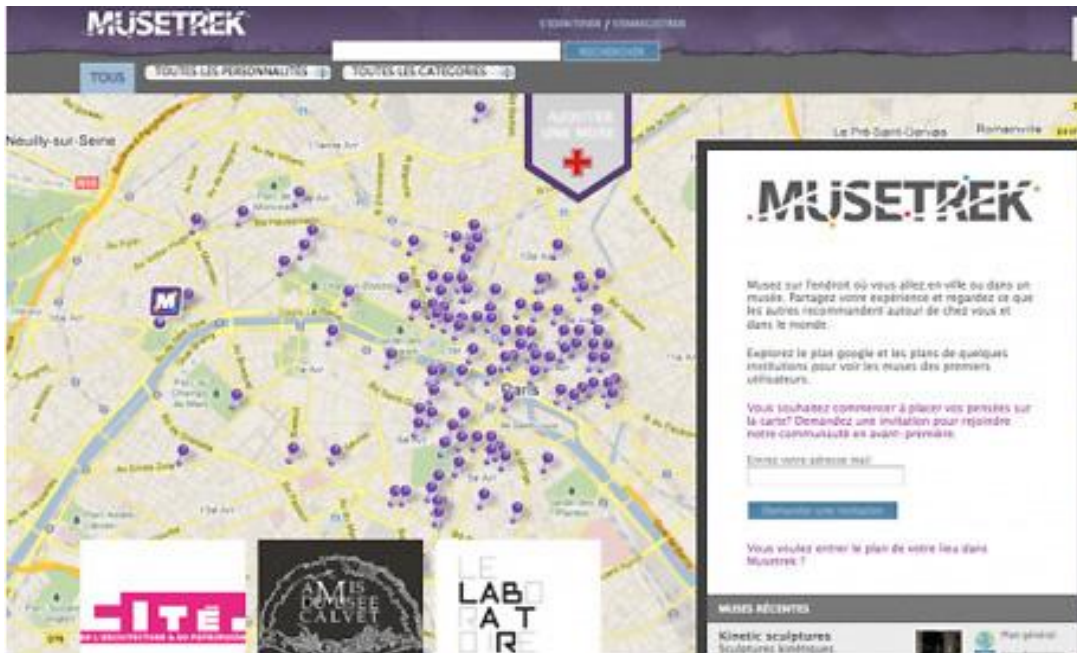
Example: Streetmuseum-Londinium app

Make stories interactive and allow users to interact with the story content

•We have to create a new type of story in which the reader-user can influence the narrative and its evolution in real time.

•The story must be nonlinear and re-combined permanently according to the user's actions and preferences.
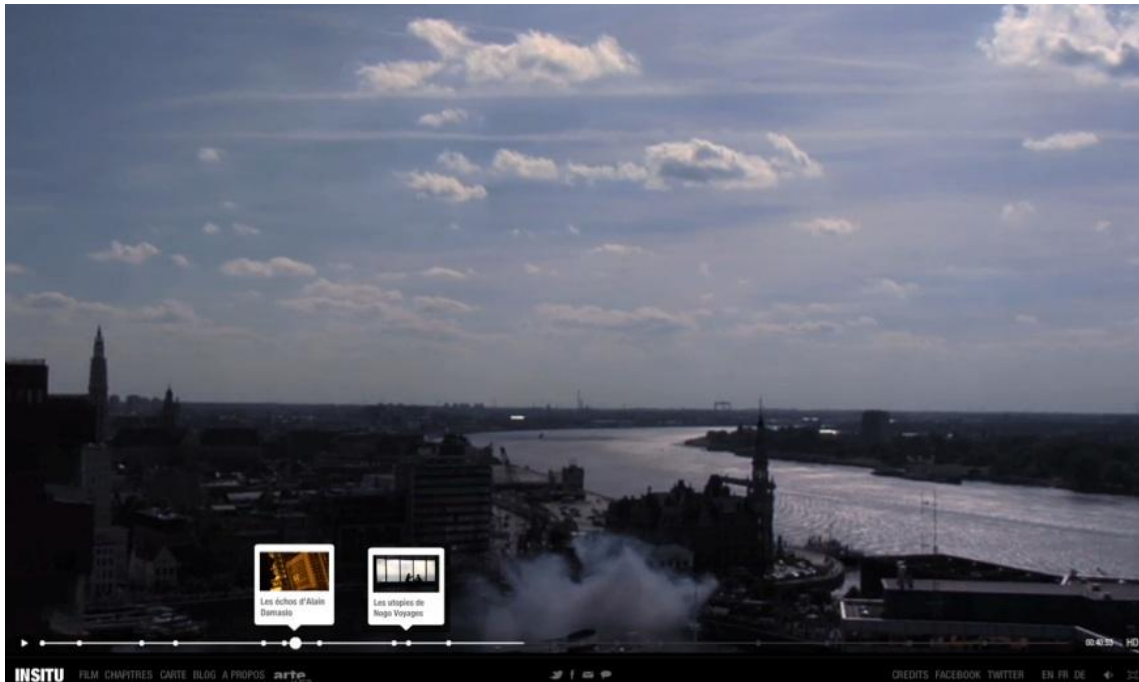
Example: Insitu interactive documentary

Combine several devices to develop a transmedia narrative universe

• It means developing projects based on several medias, presenting complementary uses specificities and technological capacities: PC, laptop, tablet, smartphone, TV, interactive scenography, multitouch screen, etc.

• The transmedia approach will enable to create a continuity of uses around content with adapted design, and to immerse the user in an original narrative universe.

Example: The builder's challenge

Strengthen the story by creating an immersive experience

- We have to set up powerful narrative process based on a blurring of borders between fiction and reality in order to create an immersive experience.

- Storytelling can be operated continuously and puts the user in a particular situation: the difference between the story told and the experienced reality becomes more and more tenuous.

Example: CultureClic

Stimulate cultural heritage mediation with augmented reality devices

•Today with mobile devices and tomorrow with a user equipped with glass or contact lens.

Example: Google Glass, smart watches and other connected objects

Make stories more contextual

•Image geolocation-based services inside buildings: indoor GPS, inside geolocated guide...

Example: Audioguide Nintendo 3DS Louvre Museum

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Give opportunity to users to create their own stories

•Users can combine existing content or create new one (images, video...) to tell stories.

•Users can write stories based on personal experience of heritage or personal testimony in link with historical event or specific topic.
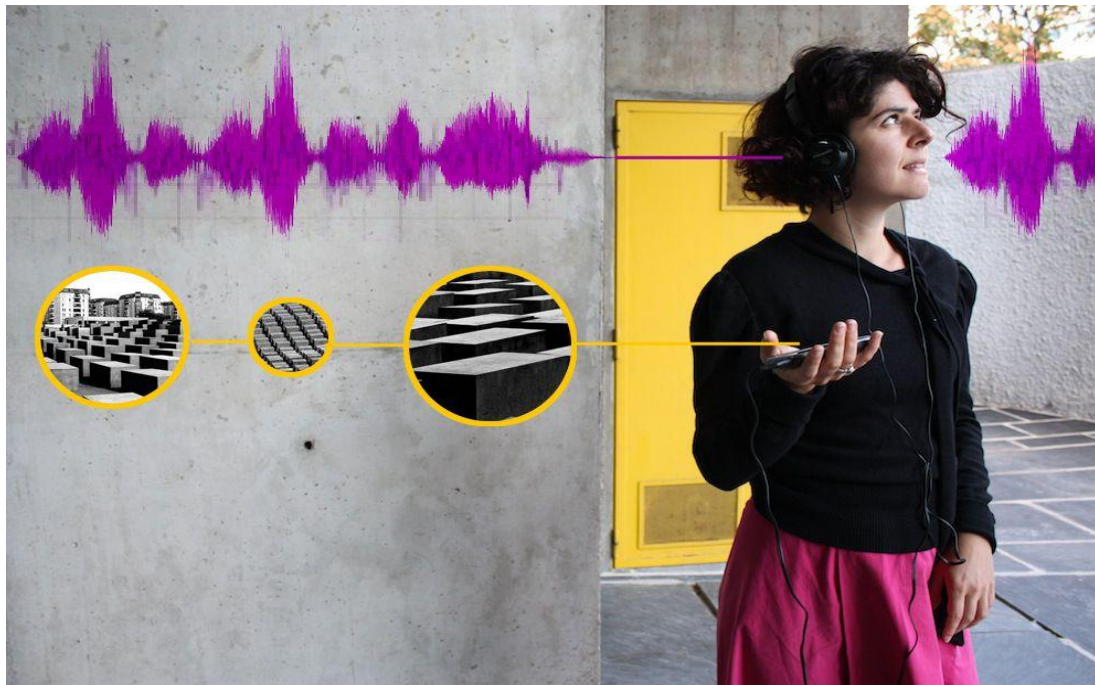

Example: 1001 stories of Denmark

# Development of innovative Human-Machine Interfaces (HMI)

• Offer to users new types of interaction to read and write stories with all human body.

• These interfaces are now tangible, multimodal using sensor (with contactless technologies), nanotechnologies, or intelligent textiles.
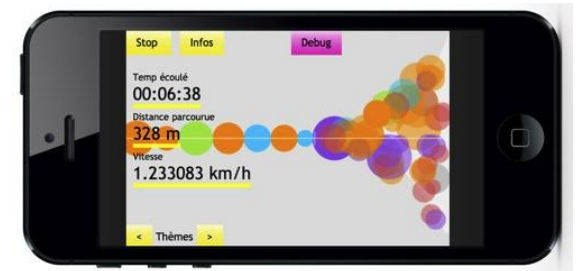
**Example: Heritage Experience**

Encourage immersion into the past

• Create digital environments based on cultural heritage contents

• Immersive devices and 3D movies allow telling stories giving life to historical site or figure.
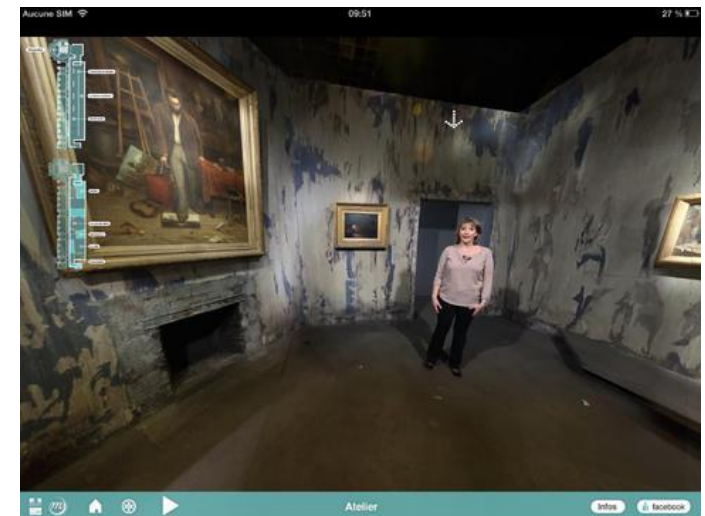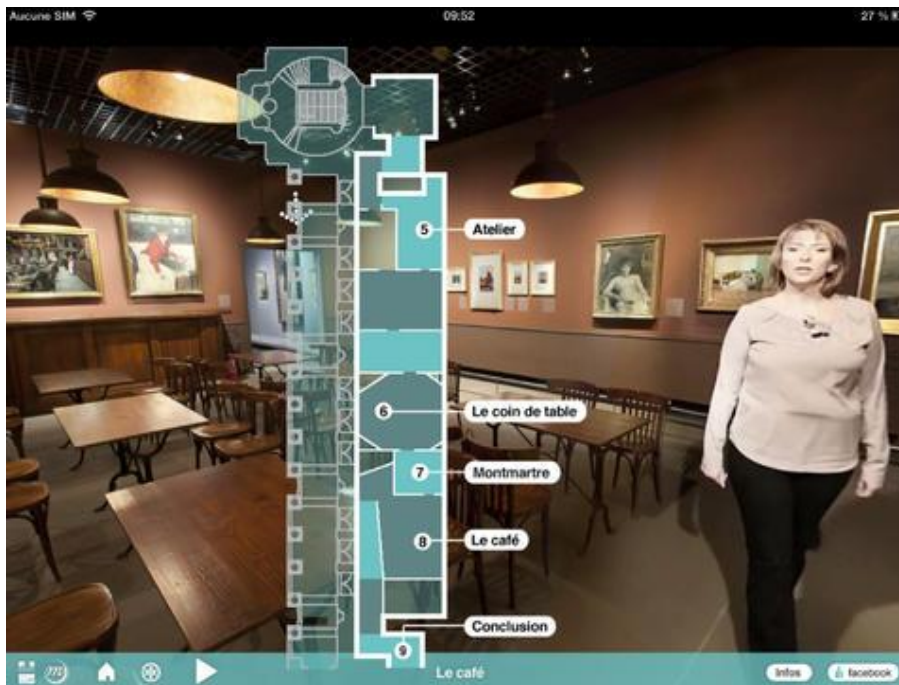
Example: Guided tour 360˚ of exhibition "Bohèmes"

Be in line with social web and semantic web convergence

•Web 3.0 fosters the convergence between reference metadata bases (main institutional actors: Europeana, BNF, INA...) and folksonomy (integrating social networks and collaborative tagging).

•This is the opportunity to create specific metadata to driven storytelling and original apps based on users' work of tagging.
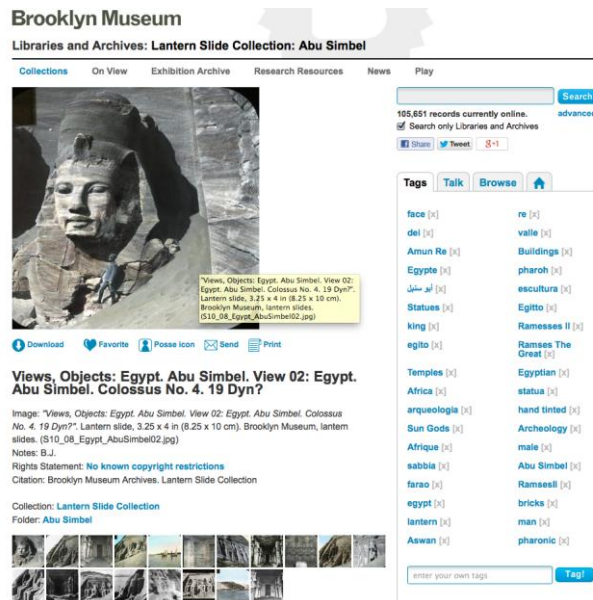
Example: Brooklyn Museum

Exploit the narrative potential of cultural data

•Cultural data are by their nature narrative basis.

•They represent an important vector of storytelling because they bear historical values, sociological representations, which could be used in narrative process to touch user.

Promote the reuse, editorialisation and enrichment of existing contents by using aggregation process

•Enriched digital cultural data can be aggregated and re-arranged in order to propose a new original piece of content, combining heterogeneous sources.

•Interconnect institutional data, user-generated content or other types of open data.

•Use API to make possible the harvesting, via metadata, of a set of content, to edit it in an editorialised form and to propose a panel of functionalities.

Create indexing process dedicated to narratives combinations of digital resources

• Set up of specific descriptors, adapted to narrative applications.

• Metadata with sensitive dimension, thematic descriptors and an affiliation to a specific use scenario.

Create storytelling services based on a participatory model

• It means developing services in which the user has the necessary tools to create and put into narrative his/her own contents.

• Increase attractiveness of the cultural content through social networking, content sharing...

Base your storytelling project on collaborative data indexing

• It means to exploit the important potential of the "folksonomy" (collaborative system of informal data structuration).

• Create services based on the valorisation of the overabundance of information and content on the web.

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Experiment the possibilities of artificial intelligence to edit content and to tell stories

•The building of analysis model of a given situation is a very interesting way to generate original and interactive stories.

•It implies to pre-define rules of editing and to set up a database with organised and indexed digital content.

•It especially means to have an important computer programming work through the creation of algorithms to enable the gathering of digital data in real time, according to these predefined rules.

Choose adapted solutions of digital resources management

Choose tools able to answer to current requirements for creating a digital storytelling project (Web documentary, content linked to a place / geolocation, augmented reality, virtual and digital exhibitions):

- Easy creation of interactive and enriched documents

- Digital asset management

- Use of API

- Distribution of content on several applications

- Possibilities to link data with space through interactive cartography

- Creation of digital exhibitions with specific needs

Use all the potential of mobile technologies to create locative storytelling

• Exploit al the potential of mobile digital devices, of their components (GPS, compass, accelerometer, data connection, camera) and functionalities (mobile applications).

• Produce a narrative type essentially based on territorial anchorage (with multimedia content geolocation) and social networks enabling individual or collective exchanges linked to a real place.

Use existing services and technologies when possible

• Current web services propose exportable players, embed codes or other free CSS style which could be edited and customized to create mashups.

• Connect your storytelling project to content sharing platform or data visualization interface in order to experiment use scenario before a real implementation and heavy developments.

Think like a laboratory to design your storytelling services

•The Living Lab approach is a relevant methodology for digital storytelling project.

Develop an integrated methodology for site-specific intervention

•Needs definition and site exploration: watch, analysis, shared diagnosis for compiling knowledge database on a specific site.

•Stimulating creativity by transdisciplinarity and users' involvement: co-creation between users and producers.

•Site specific experimentations with community of users: workshops, creative residencies, participatory actions

•Evaluation with users and producers

Encourage the users involvement

•You need to produce a collaborative work with creatives, experts, designers, researchers, professionals, and specific partners in connection with users.

Develop an IPR policy openness oriented and supported by a specific reflection on IPR management, accessibility and reuse of the data

•If your digital storytelling project integrates existing contents you have to be careful on the terms of reuse and diffusion.

•Documentation on Creative Commons licences and other free licences.

Ask the good questions at the right time

•We have to lead an on-going reflection on IPR questions and new legal forms, particularly in the framework of innovative digital projects (technologic mashup, composite services, collaborative work).

Bring together specific skills to answer to new right issues

•Think about the implementation of expert committees, gathering lawyers, representatives from cultural institutions, new media specialists, professionals of media and audiovisual archives.

Find the best way to present your storytelling project

• The term "digital storytelling" means several type of project, different forms of mediation, it uses various technologies and requires to clarify all of this to be very communicating.

• From virtual exhibition to mobile application, storytelling refers to a large range of projects and ways to tell digital stories: stories are open-ended, branching, hyper-linked, cross-media, participatory, exploratory...

• We have to use a basic common vocabulary and typology to label our projects.

Create and animate user community around narrative process

• Improve the attractiveness of cultural heritage contents and delegate a part of this work to users.

• It means to create digital environments in which users could re-appropriate contents, and even more cultural places, museums, collections, exhibitions, events...

• In the same way, stories based on cultural heritage contents should also be supported by users that should be ambassadors of a narrative project through simple actions of sharing, commentaries writing…

Contact

Maria Teresa Natale
mariateresa.natale@gmail.com
ICCU www.iccu.sbn.it

Julien Brouillard
Julien.brouillard@dedale.info
Dédale www.dedale.info

www.athenaplus.eu