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IP and Europeana Space Pilots: Case Studies

The Museums Pilot and Hackathon

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Museums

User engagement, education, interaction, audience development, user generated contents, market competitiveness... These are some of the key elements that museums and memorials need to take into account nowadays, while still facing “old” challenges such as the optimisation of decreasing financial resources, the update of collections, and the design of new exhibition paths.

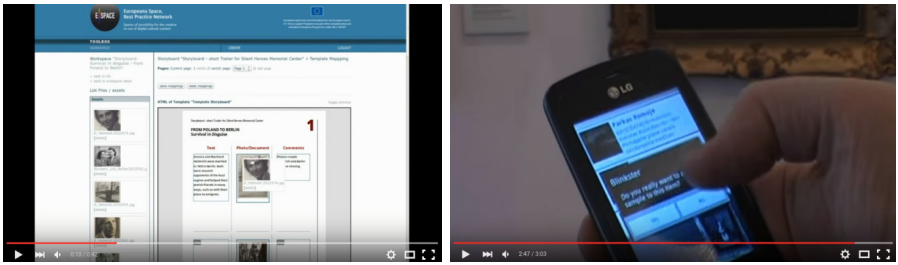
The E-Space Museums pilot set out to create ready-to-use solutions for content and exhibition curators but also for end users, that maximise results leveraging on the archive of multimedia contents available in Europeana combined with web-based and mobile solutions.

Two distinct products are the result:

- The Toolbox, a web-based application dedicated to museum curators, for the design of brand new educational videos and promotional worksheets blending the museums/memorials contents with the heritage of Europeana.
- The Blinkster mobile app enriches the exhibitions with Europeana contents, due to features such as augmented reality, object recognition and geolocalisation, for visitors’ education and entertainment experiences.

The two solutions developed in this pilot were tested in a diversified international scenario of museums and memorials from Germany, Lithuania and Estonia.

The Museums Pilot and Hackathon



Video showing worksheets within the Toolbox and a preview of the Blinkster app.

Introducing the Museums Pilot and its Approaches to Intellectual Property

With the rise of mobile technology and the use of mobile applications, museums are increasingly focused on making use of these technologies in the best way they can, to attract new visitors and enhance their visitors' experience. The E-Space Museums pilot explored how the large amount of available digital cultural heritage content could be reused in an innovative way for education and "edutainment" purposes. The work built upon already existing solutions which were then developed by the small and medium-sized enterprise (SME) partners in real use cases with customers.

The pilot delivered two separate products:

- **The Toolbox**: a web app designed for educational staff and curators in museums and memorials, focused on enhancing the museum experience with additional information, images and stories (especially drawn from Europeana), tailored to collections and exhibitions.
- **The Blinkster app**: aimed more directly at museum visitors, this app allows people to take pictures with their mobile phone and receive supplementary information about the item or image in front of them. To make this possible, institutions have to populate the back-end database with both images and text.

The pilot took this dual approach because both applications had great potential to enhance the experience that museums offer to their audiences: either through increasing the available information and stories around a specific collection, or by allowing visitors to access additional information about the museum objects which they choose to scan themselves. The Toolbox solution is developed primarily for small and medium sized institutions with limited resources in terms of staff and money. In addition, a series of events and evaluation activities further fine-tuned these two products, and evaluated their effectiveness and usability.

The Toolbox work was executed by Lehmann & Werder Museumsmedien in collaboration with cultural institutions such as the German Resistance Memorial Center (GDW) and the Silent Heroes Memorial. In the second half of 2015, the web app was delivered, together with worksheets and materials produced by the memorial through the use of the Toolbox.

For the Blinkster app, EUREVA provided the technology, with the Stiftung Preußischer Kulturbesitz (SPK), the Lithuanian Art Museum (LAM) and the Estonian Ministry of Culture (EVK) functioning as content providers. The overall co-ordination of the pilot was the responsibility of Fondazione Sistema Toscana (FST).

In March 2016, the pilot organised a hackathon challenging participants to redefine the museum experience and take their new ideas to the market.

This case study will explore how the pilot dealt with openness in terms of IP, with a special focus on the hackathon and its outcomes.

Approach to Openness

The pilot took different approaches to the two products it delivered, with the Toolbox being more open in nature than the Blinkster app. The Toolbox was created using open source software (a Linux / Apache web server with a Typo3 CMS installation), while Blinkster was built with proprietary software. The architecture of Blinkster was already in place at the beginning of the project, and EUREVA continued the development on both systems that were agreed for the Europeana Space project: iOS and Android.

However, both apps make use of open cultural data. For the Toolbox, information and images can be added to create worksheets for educational work and storyboards for media productions using specifically designed templates. Data can be uploaded from local sources or from Europeana directly. By using the Europeana API, the Toolbox makes this data easily available for its users. In the pilot's application of the Toolbox with the GDW and the Silent Heroes Memorial, images were drawn from Europeana, Wikimedia Commons, the RBB and a number of specific repositories relevant to the topic (such as www.searchformajorplagge.com). Of the total number of images used, around 15% had an open licence, while the remaining 85% had either an NC (non-commercial) or ND (No Derivative Works) restriction.

There was a close collaboration with the University of Exeter (IPR Team) to develop the agreement for the use of content between the German Resistance Memorial Center and Museumsmedien, listing all used data (photos and documents). Pilot partners also greatly valued the technical and IPR support by E-Space partners, which facilitated the use of digital content from sources other than the content provider itself.

With the Blinkster app, a museum visitor can take a picture of an object to receive extra information about it, such as descriptive text or additional links, and it therefore acts as a possible substitute for traditional museum

audio guides. During the pilot, the E-Space content providers tested the app by providing content from their museum collections. Through a process of feedback and evaluation, several features were improved or added to the application. Although the app itself is built with proprietary software, most of the content provided by SPK, LAM and EVK consisted of openly licensed content from Europeana, which was further enriched by its links to other, largely open material from sources such as Wikipedia. Of a total of around 1100 images, around 80% were available as CC0 or CC-BY — only content provider SPK had a policy of using a non-commercial restriction for their images to prohibit commercial use.

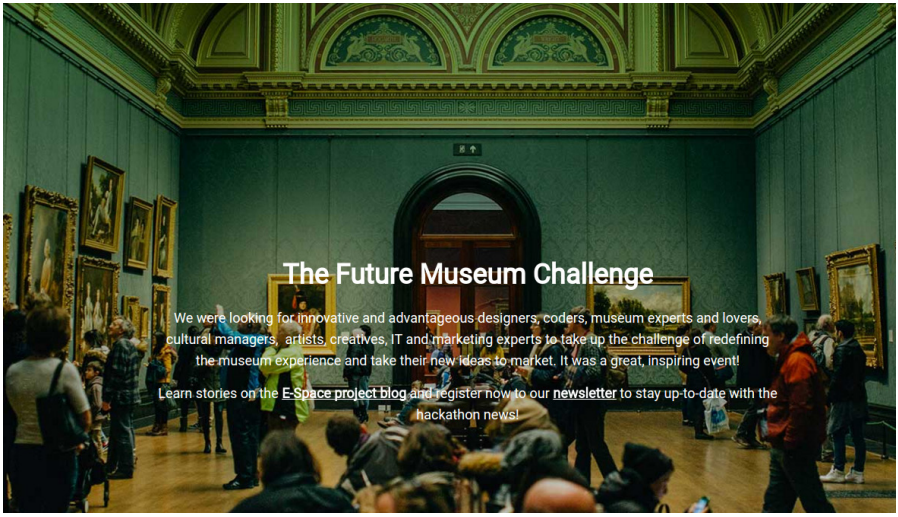


Image from the hackathon website: http://www.europeana-space.eu/hackathons/museums

The Future Museum Challenge

The Museums pilot hackathon was entitled "The Future Museum Challenge", and took place on 17–18 March 2016 in Venice, Italy. Organised by the Ca' Foscari University of Venice and Fondazione Sistema Toscana, with fellow pilot partners Museumsmedien, SPK, LAM and EVK, the event invited participants to re-invent the future museum experience. It focused on building new products, and developing creative ideas that would bring mediation strategies in museum environments up to a 21st century standard, for example, by enhancing content, engaging the audience and improving the educational experience. The products developed would not only be creative, but also able to produce sustainable business models.

Following the initial announcement, 120 participants registered and were invited to attend a pre-event on 5 March 2016, during which more information was given on the hackathon concept, followed by a questions and answers session with the organising team. A total of 16 teams, consisting of a mix of designers, coders, museum experts and regular visitors, cultural managers, artists, creatives, IT and marketing experts took part in the event itself.

On the first day, several talks by project partners introduced participants to key outputs of the Museums pilot for inspiration, as well as more information on the E-Space project and Europeana. The IPR tools in the E-Space Content Space[1] were mentioned during these introductory talks, but the tools were not used by participants at that time, because they became engaged in concept design rather than the use of specific content. These introductions were followed by a 48-hour marathon of brainstorming, Q&A, networking and preparation of the final pitches, which were given at the end of the event. The jury — consisting of Remix (the partner responsible for the mentoring and incubation of the winners), several pilot partners, a representative of Europeana, IT and museum experts — selected three winning projects for participation in the BMW in London.

1 See http://www.europeana-space.eu/content-space/

Tools and Content Used for the Hackathon

Hackathon participants were encouraged to use open data and content from Europeana, with one of the opening talks focusing on the Europeana API. The technical solutions developed within the E-Space Museums pilot, the Toolbox and Blinkster app, were introduced at the start, and content providers SPK, EVK and LAM showed how their digital content had been used for enrichment.

During the event, participants had access to the Toolbox and Blinkster, as well as to millions of digitised cultural heritage items from around the world via the E-Space Portal. Museum experts were present to discuss audience needs, from the marketing and educational perspectives, to e-learning educational endeavours, as well as general information on how these institutions operate. Additionally, technical staff was on hand to assist with development issues, and business modelling consultants helped shape participants' ideas for the marketplace.

Discussions at the Future Museum Challenge

Although participants were encouraged to use Europeana content and technology from E-Space, the event was very flexible and participants also had space to develop ideas in other directions. This resulted in 16 final pitches of projects that spanned a wide range of different applications, of which the following projects were selected as the winners:

- **YourMuseum**: a mobile app that enables visitors to see more than what is seen from the usual visitor's eye, a sort of "behind the scenes" stories about artworks;
- **SpicedApp**: an app that spices up the museum visit with edutainment features;
- **PostArt**, which developed a way to share contents and emotions from the museum visit through the production of specially printed postcards and other gifts.

Post-Hackathon Reflection

In the process of registration for the hackathon, a question came up from a potential participant about the public presentation of ideas developed at the event. She was curious to know whether the ideas that were pitched were somehow protected, preventing the ideas that would not go on to win from being "stolen" following their presentation at the end of the event. The IPR team replied that this kind of protection is not possible, since only ideas in tangible form are protected by copyright; ideas themselves are not protectable until they are written/drawn/recorded in some form. One way to overcome this is to enter into a confidentiality agreement. However the view was taken that "within the E-Space project, we should not request or require participants at the hackathons or business modelling workshops to enter into confidentiality agreements. We feel that this would send out the wrong signal to the participants. These events are about experimentation and ideas sharing. We have found that open discussion at the events can greatly increase innovation and the ideas that individual participants work on."

Though the question of protection for ideas came up prior to the hackathon, issues around intellectual property did not come up during the event itself.

Following the hackathon, it was anticipated that the YourMuseum, PostArt and SpicedApp winners would need support and guidance in their approaches to dealing with IP and ownership as they entered the business modelling stage.

Business Modelling and Incubation

The winning teams attended the BMW led by Remix on 16 May 2016. The workshop was very useful in supporting participants as they explored the business potential of their project ideas, in order to evaluate which were most suitable for progression through to the intensive incubation phase.

The workshop was organised in two main sections: Creating Value and Resourcing Value Creation.

Although a one-day session might not have been sufficient to answer every question, the broad sketches of ideas and opportunities developed during the course of the day enabled the selection of a successful team to progress through to incubation. Participants refined their ideas during a guided exercise that started with examining value propositions and mapping potential business models, and ended with value creation and delivery. The thinking around value delivery took the effective management of IP into consideration as one of the essential elements.

During the BMW participants were challenged to look at their ideas from completely new angles, and respond to feedback on the decisions they had made. Awareness was raised that in changing one aspect of a business model, all other aspects are affected. Participants' ideas and concepts therefore changed drastically during a BMW based on the decisions they made. While none of these changes were final, it opened up a world of possibilities for the teams, and allowed the E-Space team of judges

and advisers to better understand, not only the products, but also team dynamics, goals, and attitudes.

In the event no further specific questions were raised about IP by any of the teams either during the BMW or subsequent incubation.

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