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IP and Europeana Space Pilots: Case Studies

The Europeana TV Pilot and Hackathon

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Television

The E-Space TV pilot exploited the opportunities of reusing Europeana and other digital cultural content in SmartTV applications to create new TV experiences. A technical framework provided an environment to analyse, personalize and present this content. The pilot supported and evaluated two scenarios in which video material was brought out of the archive and onto the viewer's screen.

- The broadcast scenario developed an HbbTV (Hybrid Broadcast Broadband TV) application based on the Berlin Wall. The SmartTV application targeted a social community, and was based on archive videos about the building of the Berlin Wall in 1961 up to German re-unification in 1990.
- The local community scenario focused on applications for an immersive user experience in the living or class room. It investigated use cases such as the elderly re-living personal memories through TV content or pupils learning about historic events. The content included different themes such as: Arts and Culture, Education, Politics, Religion, Society, Sport and History.
- A Multi-Screen Toolkit with tools, workshop methods and proof of concepts was developed by the pilot, and made available for the hackathon in April 2015.

The Europeana TV Pilot and Hackathon

The TV Pilot and Approaches to Intellectual Property

The TV pilot used archive video material to develop an HbbTV application based on the Berlin Wall and a Multi-Screen Toolkit for immersive user experiences in the living or classroom. Three technical partners focused on customised and bespoke developments were responsible for the successful delivery of the pilot: Noterik, an Amsterdam based company with over ten years of experience in developing video applications, focused on back-end services and the multi-screen framework, Proton Labs on the front end SmartTV applications and 2nd screen applications with HbbTV compatibility, and NTUA (the National Technical University of Athens) managed the content and metadata connection between the Apps and the Europeana and E-Space APIs.

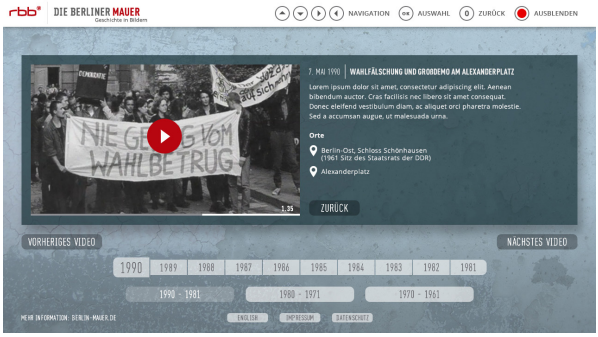


Image of the Fall of the Berlin Wall App, courtesy of Rundfunk Berlin-Brandenburg

The TV pilot decided to use as much "open" content for the pilot and hackathon as possible to avoid intellectual property (IP) issues arising, or at least to minimise the risk of copyright infringement, disputes over ownership, and a lack of funding to clear rights at the business modelling stage. The pilot decided to develop only tools so that the content would be inter-changeable. Therefore, specific content would not be crucial in achieving the ultimate aim of the pilot, that is to showcase how digital cultural content sourced from Europeana and other repositories can be reused and exploited by the creative industries. Content could always be replaced should IP issues arise without undermining this overall objective. IP was, however, generated in the development of the tools during the pilot. In line with the provisions in the DoW, the TV pilot retained ownership of copyright in the HbbTV application as this was their background IP. It was agreed that this would then be used only for demonstration purposes during the hackathon. By contrast, the multiscreen toolkit was developed during the course of the pilot and made available on an open source basis.

The TV Hackathon and Approaches to IP

IP is generated in hackathons through additions, enhancements and remixing of content and/or tools. Given the collaborative nature of work undertaken at hackathons it can be unclear as to who owns IP that is generated during the process. In the case of the TV pilot developments of the tools generated IP and as a result the need to identify ownership. The E-Space IPR Team have created tools to help hackathon owners think about how IP that arises during a hackathon might be managed and these can be found in the E-Space Online IPR Consulting Kit[1].

TV pilot organised two pre-hackathon social events for participants to meet and plan the event. The hackathon organisers took the view that the more

1 http://www.europeana-space.eu/content-space/ipr-toolkit/

the “IP policy” could be claimed as an organic, “bottom up” policy the more likely it was to “work”. The hackathon organisers decided only to highlight some IP risks that could arise at the hackathon, such as attendees using ideas learnt during the hackathon as they were not protectable by IP, but leave it to the participants to come to decisions among themselves about what content and tools they would use and who would own what. The hackathon organisers reasoned that this would preserve the “open” and “free” approach that makes hackathons so successful at innovation. Being prescriptive regarding the strategies and decisions that should be made around IP, or providing written information on the restrictions associated with reuse of tools and content was considered by hackathon leaders to be off-putting for participants and risked stifling creativity and taking up precious time for sharing ideas and building new tools. In addition Daniel Ockeloen of Noterik made it clear in his introductory remarks at a pre-hackathon event, that all hackathon outputs would be assumed to be open for further development with a view to commercial reuse, and that if anyone had an idea for something that they planned to build and commercialise independently they should not bring it to the hackathon.

The TV pilot Hacking Culture Bootcamp took place on 8–10 May 2015 in Amsterdam at Waag Society. This was a 3 day hackathon event for creatives, entrepreneurs, designers, directors and developers, who had the opportunity to develop innovative ideas in teams of creative thinkers and coders. Organisers from Waag Society, Sound and Vision and Noterik, challenged participants to develop prototypes of SmartTV applications, in particular to create new multi-screen experiences with a focus on digitised historical footage, and to experiment with Smart Audio/Video formats in order to come up with inspiring applications that create new TV experiences for the public or private domain, using cultural heritage content available via Europeana and other portals. Participants included game developers, storytellers, interactive designers, and app developers.

Content used for Hackathon

Concerns were expressed by the organisers prior to the hackathon that participants would make use of proprietary content or content that was only available to be used in a safe space. The outcome would be that partners may have to spend time clearing rights rather than focusing on the further development and the market-readiness of the prototypes. In response the hackathon organisers aimed to make use of openly licensed and public domain content. This reinforced the focus of the hackathon onto the tools and their ability to showcase how they could make use of digital cultural content, rather than on the content itself. It was emphasised that what the jury would be looking for from the winning teams would be tools rather than content, and specifically tools that could be used with a range of content.

Several content sources were identified by the organisers for reuse by the TV hackathon participants. These were Europeana, the open data sets on Europeana Labs, Open Cultuur Data, Open Beelden, and EUscreen. Participants at the hackathon were also informed that they had access to content from three partners in the project, Sound and Vision, Rundfunk Berlin-Brandenburg (RBB) – DE and Istituto Luce Cinecittà (Luce) – IT. All hackathon participants were given access to an online Google drive containing guidelines for what content and tools to use during the event. This information includes descriptions of the kind and quality of content included in the archives, the licenses, and links to example topic collections and metadata. This information included descriptions of the kind and quality of content included in the archives, the licenses, and links to example topic collections and metadata, and is now available on the hackathon miniwebsite, that is reachable via the project website.

The Google drive directed participants first to Sound and Vision open video content provided via the Open Images platform. Open Images[2] gives access to over 4000 videos from Sound and Vision and others under a Public

2 http://www.openbeelden.nl

Domain or Creative Commons BY-SA license. Also recommended were Sound of the Netherlands[3], which gives access to a collection of about 2,500 historical sound recordings, all available under either a Creative Commons – Attribution-ShareAlike license (CC BY-SA) or a Creative Commons – Attribution license (CC BY), and Open Culture Data Search[4], a search engine built by the Open State Foundation used to search through all the data in the Open Cultuur Data API. Content (images, sounds, videos) from various Dutch cultural institutions were included under an open licence.

RBB provided 500 videos from the German broadcast archive and the former East Germany state TV spanning a timeline from the beginnings of the Cold War in the 1960s till the reunification of Germany in 1990. The videos were available via Noterik's Springfield platform for tests and demonstration purposes only, both at the TV hackathon and the pre-event on 9th April 2015. They had no licence for use at the hackathon events and it was taken on trust that they would not be used outside these events, which would be an infringement of the proprietary licences attached to the videos. If these were to be used at the business modelling stage, rights would need to be cleared.

Luce provided access to EUscreen, a collection made up of 2800 video items (to be extended in the next 12 months to about 4000 items) and a uniform set of metadata, with all the videos hosted on the Noterik's Springfield platform. They also provided the collections available on their YouTube channel[5]. Both collections were accessible and usable for both pre-hackathon and hackathon days only. It was agreed verbally that the images used would be deleted from hardware at the end of the hackathon, and Marco Rendina of Luce was on hand to make sure this was done as far as was possible. Luce did not provide any openly licensed content but took advantage of the safe space of the hackathon. They made the content they provided to participants free to use in any way they liked but only within the context of the hackathon. This was by verbal agreement

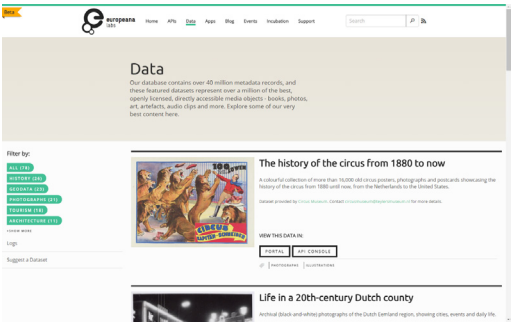
3 http://www.geluidvannederland.nl

4 http://search.opencultuurdata.nl/#/

5 https://www.youtube.com/istitutoluce

during the hackathon discussions which led to the decision that the content would not be used outside this event, and RBB was on hand to supervise, making sure as far as was possible that this agreement was honoured. As the the project's "protected space" was not operational at the time of the TV hackathon so these conditions were based on verbal agreements and trust.

Participants were pointed to the Europeana database[6] where they could access cultural heritage collections from across Europe, either via the Europeana API[7], or by browsing open datasets on Europeana Labs. They were also able to do searches on the Europeana portal itself[8]. The Google drive provided a quick guide on how to do searches on Europeana; advising participants to filter options to narrow down their searches, e.g. by content type (video, image, sound, text) or licence. It stated that the datasets available via Europeana Labs are either under a Public Domain, CC0, CC-BY or CC-BY-SA licence and that the datasets had been tagged with topic information to make them easier to search. The TV hackathon Google drive provided this link to a short screencast[9] introducing the Europeana Labs and the Europeana API.



Europeana Labs - Datasets

6 https://www.europeana.eu

7 http://labs.europeana.eu/api

8 http://www.europeana.eu/portal/en

9 https://www.youtube.com/watch?v=hTAcyfB6EjI

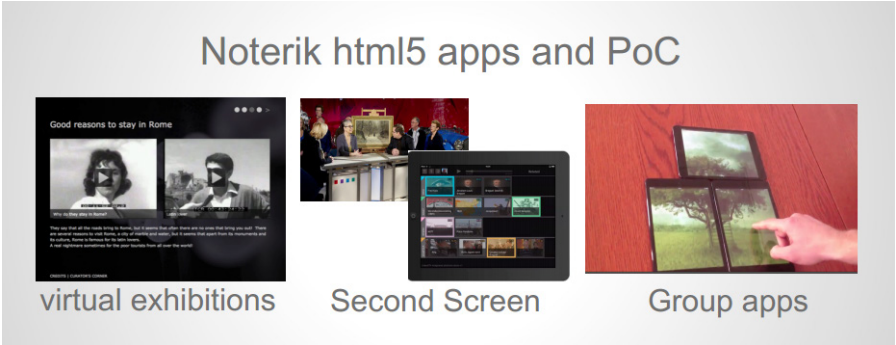
For those new to creative commons licences the following link was also provided via the Google drive: http://creativecommons.org/ and an article at http://pro.europeana.eu/blogpost/creative-commons-licenses-are-great-but-how-to-use-them. More detailed information was also available in the in the Content Space on the E-Space website, in the CC License Chooser[10].

A representative of the World Press Photo Archive (WPPA) was present and participated in the hackathon. The World Press Photo Archive contains only proprietary content, unavailable for reuse. However, since a partner was present, one team made use of it for a prototype, verbally agreeing to use the WPPA content only within the hackathon. This was not the team that was chosen to go through incubation, but nonetheless the team's discussions are ongoing with regard to a prototype and should they wish to use the WPPA materials for a commercial product that will be sold on the open market, they will have to negotiate with the WPPA. It is notable that the content required to showcase the tool was inter-changeable.

Tools used for the Hackathon

As noted above, the TV pilot made an open source platform for multiscreen applications available at the hackathon. A broadcast scenario led by RBB and the local community scenario led by Sound and Vision were presented as inspirational best practices. The aim was for participants to develop prototypes of SmartTV applications that create new TV experiences.

10 http://www.europeana-space.eu/wp-content/uploads/2015/07/spa_cspace_09_cclicchooser.pdf



Tools to be provided in the TV hackathon by E-Space partner Noterik

Noterik provided the main software developed as part of the TV pilot as a multiscreen toolkit for the TV hackathon under an open source licence. In the event it was mostly the Noterik multiscreen toolkit[11] that was used. While no one was making new content in the TV hackathon, the software being developed had the potential to become proprietary, as developers and other participants built upon, remixed, enhanced and otherwise altered the tools provided.

Not all participants made use of the multiscreen toolkit. It was provided on an optional basis, which meant the hackathon participants could choose to use their own systems if preferred. The following links were provided by Noterik to access their tools: Github: http://noterik.github.io and Open Googledoc: http://www.noterik.com/hackathon.

The VBOT platform from Proton Labs, which is not open source, was also made available, although ultimately it was not used in the hackathon.

11 The Multiscreen Toolkit is based on HTML5 and Java, and provides a foundation for building and prototyping of a wide range of video applications. Among other things, the toolkit enables advanced remote control options, co-viewing and collaboration around videos. In addition to offering reusable software components, the toolkit aims to facilitate easy and quick prototyping of multiscreen application ideas and proof of concepts. Examples of applications built using the toolkit include a second screen application for watching enriched TV programs and a spatial spotting application for pinpointing objects in a co-viewer setup.

Post-Hackathon Reflection

Project partners were keen to share the winners' ideas in blog posts and video. Remix, the project partner with oversight of the business modelling and incubation phases, sought to contain this, since, in contrast to a normal hackathon, the winning ideas were intended to be commercialised. It was thought that if too much information was given publicly, then third parties might use these ideas ultimately to the prejudice of the winner – ideas are not protectable unless it is agreed that they are not to be used or shared by way of a non-disclosure (confidentiality) agreement. Consequently, there was discussion about whether a non-disclosure agreement amongst hackathon organisers and project partners should be used in future E-Space hackathons to make sure everyone attending is aware that ideas should not be disclosed outside of their hackathon teams. It was also noted that what was developed could be the subject of a patent. Disclosing information about the invention before a patent was applied for would destroy novelty meaning that a patent would be unobtainable. It was noted that if there was no intention of applying for a patent, then blogging in general about ideas (rather than the specific detail of what is proposed) such that anyone reading it would not be able to recreate the substance of the idea is fine. As with an emphasis on IP before the hackathon, the challenge with introducing a non-disclosure agreement between hackathon organisers and project partners is that it brings a formality to the proceedings. This in turn can make people guarded and less willing to share ideas.

Business Modelling and Incubation

The BMW, organised by Remix, took place in London on 26 June 2015. Three winning teams from the TV hackathon attended.

We Make Known: offer an online platform and physical instillation that allows museum and archive visitors to serendipitously explore large collections by using a special algorithm and exhibition management system.

Bosch: an application inspired by the old theatre method of lighting single performers on stage. Bosch applies this method to art allowing users to add their voice to individual characters which can be layered and played back, bringing a new method of exploration, conceptualisation and engagement to paintings.

Art(f)inder: a mobile application that empowers users via a swiping left (no) right (yes) action to save their art preferences. With each swipe the Art(f)inder algorithm generates recommendations for museums, galleries, archives and libraries for users to visit in new cities. Art(f)inder offers a second social layer matching users with others who "liked" similar works facilitating social interaction and meet-ups.

Much of the BMW focussed on the value that could be extracted from the ideas presented by the participants and for whom. The business modelling was broadly based on an exploration of the Business Model Canvas[12]. The objective of the workshop was to focus on, and critically evaluate, the discussions emerging from this for each team, especially in the context of creative businesses.

On IP, discussion focused at one point on ownership: were they individual employees, or working for themselves? This mattered because it would have an impact on who owned the IP in their work. All members of We Make Known and Bosch were students, and Art(f)inder was an employee working for the digital department in a broadcaster. When questioned he

12 https://strategyzer.com/canvas/business-model-canvas?url=canvas/bmc

was happy that the employer would own (or have a licence of depending on the jurisdiction) the IP in what he was developing.

With regards to the IP in the software being developed, there was discussion around proprietary and open strategies. While each participant almost by default had opted for an open approach to what was they were developing, they were questioned as to whether they might consider making it proprietary. While value could, for instance, be extracted from licensing information from the use of the "products" in the museums sector, value could also be extracted from licensing the software. Relatedly, a proprietary approach could prevent third parties from using the software/apps for the same purpose and thus competing in the same market with the same product.

Ultimately no decisions were made about IP – as that was not the purpose of the BMW.

In deciding which project should go through to Incubation, the judges were drawn to We Make Known because it had several different components, and was well placed to capitalise upon several consumer and industry trends. Among other things, it offered an innovative user interface for online catalogues; an algorithm for serendipitous browsing across different disciplines, and a hardware installation for physical environments. One of the most attractive aspects of this proposition were the multiple revenue models and markets available to them, which were explored with the help of Remix as part of the Incubation process.

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