



Lizzy Komen
Netherlands
Andrew
Kitchen
United
Kingdom



E

uropeana Creative: Where Cultural Heritage and Creative Industries Meet to Re-Use Europe's Digital Memories¹

1 - With contributions by James Morley (Europeana Foundation), Elisabeth Stricker (ONB)

Introduction

The Digital Agenda for Europe promotes the creation, production and distribution of digital content and services for a vibrant single market¹. Several challenges in the area of digital culture are addressed under the European Commission's [CIP - ICT - PSP Programme](#), from the online accessibility and preservation of Europe's digitised cultural heritage to the re-use of these materials by creative industries. Experimentation with this cultural material for creativity is taking place in several co-funded projects like [Europeana Creative](#), [Europeana Space](#) and [Europeana Food and Drink](#). These projects experiment with business models, innovative applications and services for creative re-use of cultural resources and in particular the material accessible through [Europeana](#), Europe's museum, library and archive providing access to over 40 million items. This is especially important nowadays, considering that the creative economy is a substantial source of growth in the European Union (EU), accounting for 4.5% of total EU GDP, employing 6.7 million people in the EU and accounting for more than 4% of the EU external exports².

Re-use of digital cultural heritage is also at the core of Europeana Foundation's Strategic Business Plan 2015–2020³ and Europeana Creative is one of Europeana's key projects in this regard. The Europeana Foundation believes that openly accessible digital cultural heritage can foster the exchange of ideas and knowledge, leading to a better mutual understanding of our cultural diversity and contributing to a thriving knowledge economy for Europe⁴.

This article provides an overview of the activities and outcomes of Europeana Creative. It provides practical examples of collaborations between cultural and creative industries, the framework needed to facilitate this and the challenges and opportunities along the way.

Europeana Creative

Europeana Creative is a European project that enables and promotes greater re-use of cultural heritage resources by creative industries. Europeana Creative sets the stage for multifaceted collaborations between content-providing cultural heritage institutions and creative industry stakeholders.

It unites 26 partners from 13 European countries in an innovative alliance across multiple sectors. Project partners include content-providing institutions such as libraries, museums and archives with world-famous collections, living labs, creative industry hubs and organisations, software development, game and multimedia experts, business experts, think tanks and representatives from the education and tourism sectors.

Project partners have developed six pilot applications focused on history education, natural history education, social networks, tourism, and design. Building on these pilots, five Open Innovation Challenges were launched with entrepreneurs from the creative industries to identify, incubate, and spin-off more viable projects into the commercial sector.

Lizzy Komen, Andrew Kitchen,

Europeana Creative: Where Cultural Heritage and Creative Industries Meet to Re-Use Europe's Digital Memories



The project goals are supported by the [Europeana Labs](#) website and the Europeana Labs Network, an on- and offline environment for experimentation with content, tools and business services. Extending the Europeana licensing framework, where content holders can specify the re-use conditions for their material, is also an important outcome of the project.

Building a framework for creative re-use

To make it easier for creative industries to start re-using Europe's cultural heritage, it was necessary to build a framework that facilitates this. Requirements for creative users were gathered through different processes, in order to understand the needs for the development of the Pilots and the applications coming out of the Open Innovation Challenges.

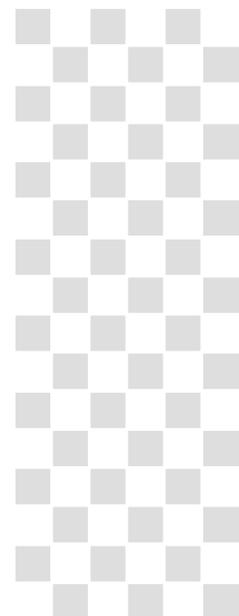
Some important requirements creative re-users have are:

- ability to identify the content that fits their needs (big problem with 40m+ objects);
- confidence that the content can be used for the purposes required (licensing conditions);
- sufficiently high quality for re-use intentions (file type, resolution and dimensions);
- direct access to the content without hurdles impeding progress (direct links only).

One of the most visible outcomes of this re-use framework is the [Europeana Labs](#) website. Its primary aim is to facilitate the re-use of code and content by creative industries. Developers can easily find [copyright cleared datasets](#), instructions for how to utilise the [Europeana API](#), as well as [inspirational apps and open source tools](#) to help them build their own application. The Europeana Labs blog contains articles ranging from technical support to techniques for content sourcing, whilst also promoting events that give the opportunity for people to attend and get directly involved.

Additionally, there are [Living Labs](#) in Barcelona / Palma de Mallorca (Platoniq's [YOUCOOP CoLaboratory](#)), Brussels ([European Schoolnet's Future Classroom Lab](#)), and Helsinki (Aalto University's [Media Factory](#)) where individuals can go to play, develop, test and build applications, whilst also creating and refining their business models through a process of co-creation⁶.

Sitting behind all of this is the essential technical infrastructure needed to support the discovery of content and development of third-party apps. Europeana contains well over 40 million records that are exposed not only through its own search portal, but also via a powerful, open API. As part of the Europeana Creative project, significant steps have been taken to solving some of the key policy and technical challenges faced when delivering suitable content to creative industries. The Europeana Publishing Framework sets out a tiered system to determine the value of content for re-use, showing content providers what they should aspire to when delivering content, and the value that this provides both to the user and to them in terms of exposure and reach. At a technical level a tool has been developed to analyse all Europeana content to determine what media are directly available. The tool checks links to files on providers' sites and extracts descriptive technical metadata such as image resolution, audio file duration, and video quality. This has resulted in new media discovery queries being enabled within the API that will





allow queries to be filtered (for example, to include only those results with high resolution image files available). In the future, this will also be extended to index dominant colours in images.

Promoting uptake through Pilots and Challenges

a Pilots

To demonstrate the creative re-use of cultural heritage, the project sets out to develop pilot applications within thematic areas focused on education, tourism, social networks and design. The goal of the pilots is not only to serve as useful and engaging applications in their own right; they also provided the baseline for the “Open Innovation Challenges”, presented later in this article. These real life examples helped to identify the challenges that the cultural heritage and creative industry partners faced while developing their ideas within the context of the Europeana Creative project, which contributed to the requirements for building a framework for creative re-use.

The Netherlands Institute for Sound and Vision is responsible for overseeing the development of the thematic pilots, four of which have been completed. The pilots in Europeana Creative start with a co-creation workshop, where interesting ideas for creative re-use of cultural heritage content are generated. The final chosen concepts are then developed into fully realised applications. The project develops business models for all pilots to help the incubation process and possibly spin off the product into the creative sector⁷.

The first two pilots that kicked-off the work were within the Natural History and History Education themes. Three products were developed: two game based applications and one application for history educators.

The History Education pilot is led by [EUROCLIO](#)⁸, the European Association for History Educators. The pilot allows history educators to create their own learning activities online via the [Historiana](#)⁹ platform by using content from Europeana. The pilot is integrated within the existing [Historiana](#) platform, which is already used by history educators throughout Europe and thus contributes to the sustainability of the pilot outcomes.

The theme for this pilot focuses on the First World War. Within the learning section on [Historiana](#), history educators can explore a set of sources (newspapers, postcards, posters, diaries, official documents, etc.) that are pre-selected by their relevance for history education, their quality, and their license.

The learning section includes the first tool that an educator can use to ensure that his or her own online learning activities make the best use of digitised heritage. This so-called “Search and Select Tool” enables re-use of content from Europeana by searching and selecting content via the Europeana API, adding new metadata, and importing sources. Other tools developed in the History Education pilot include an Analysis of Visual Sources Tool and a Compare and Contrast Tool¹⁰.



Lizzy Komen, Andrew Kitchen,
 Europeana Creative: Where Cultural Heritage
 and Creative Industries Meet to Re-Use Europe's
 Digital Memories

History
 Education Pilot:
 Historiana learning
 activities
 (CC BY-SA
 Europeana Creative)



The Natural History Education pilot is led by the National Museum in Prague (NMP)¹¹. Two products were developed: a museum game and a memory game that uses natural history content available via Europeana. Both pilot products are game based applications with a pedagogical element. The main aim is to introduce the natural history content to users in an attractive and interactive way in different environments such as family, school classes, or museums¹².

The museum game “Secret Legacy”¹³, developed by partner [Exozet Games](#)¹⁴, is a serious adventure game, which takes users on a treasure hunt and has them solve natural history education puzzles along the way. Items from Europeana are integrated within the game and the setting is based on the interior of the Museum für Naturkunde in Berlin. The game builds on a solid technical framework (using Unity3D) that demonstrates that it is possible to construct a workflow that incorporates digital cultural artefacts from Europeana into a professional-grade educational game.



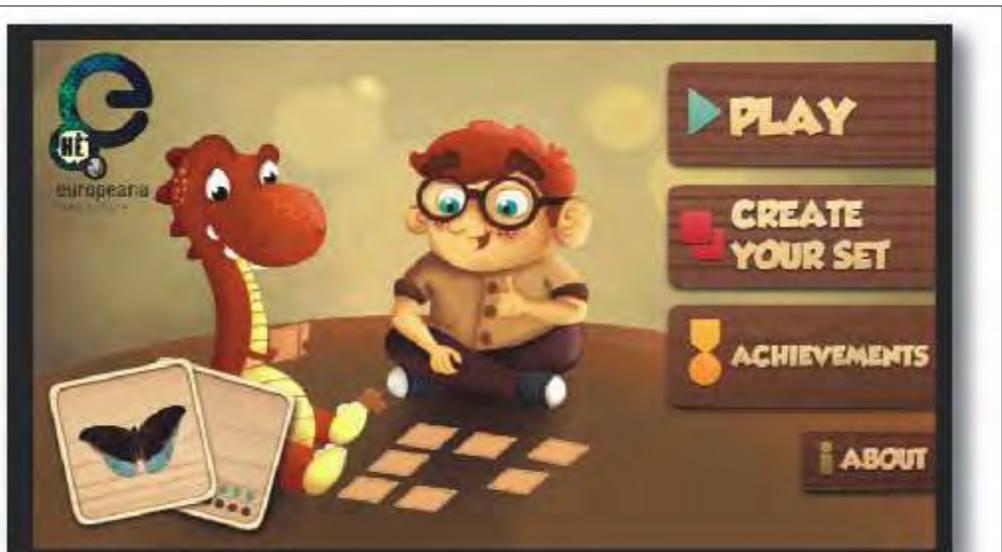


Natural History
Education Pilot:
Secret Legacy
(CC BY-NC
Europeana Creative)



The memory game “Memory Match”, developed by Semantika¹⁵, allows children and young adults to create memory sets of objects such as minerals or fossils by answering questions related to natural history. The sets were built from pre-selected content on Europeana and content from the Museum für Naturkunde in Berlin and the National Museum in Prague. The code of the game is open source and available on Europeana Labs: <http://labs.europeana.eu/apps/memory-match/>. This allows others to build on top, extend or modify the game for different scenarios.

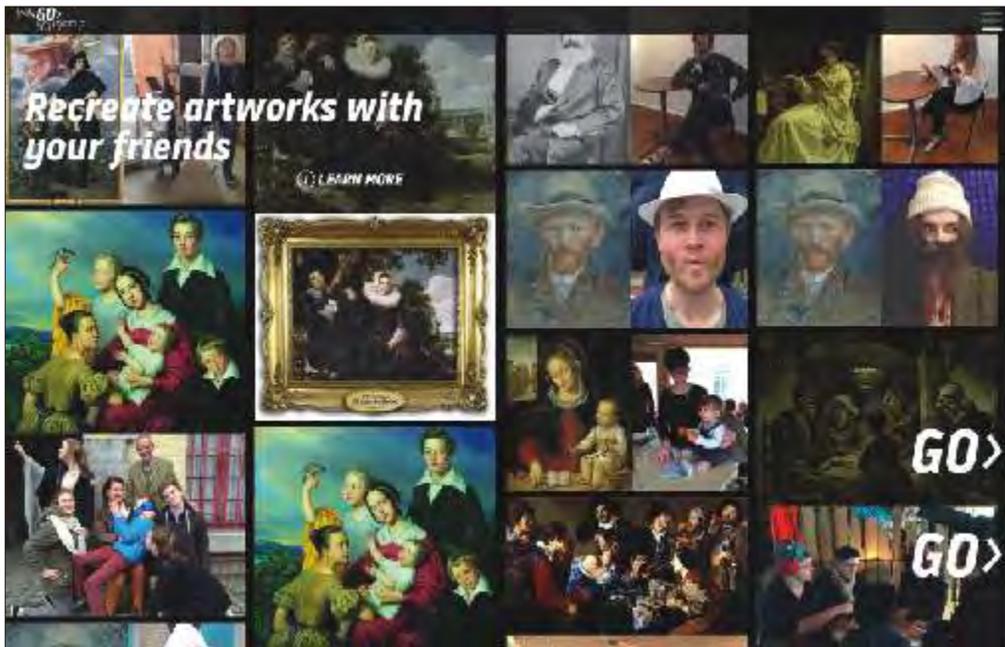
Natural History
Education Pilot:
Memory Match
(CC BY-SA
Europeana
Creative)



Lizzy Komen, Andrew Kitchen,
 Europeana Creative: Where Cultural Heritage
 and Creative Industries Meet to Re-Use Europe's
 Digital Memories



The Tourism Pilot, “VanGoYourself”¹⁶, is led by PLURIO.NET¹⁷. VanGoYourself is a responsive web application allowing users to recreate paintings and images by uploading the re-enacted image, twinning it with the original and sharing it via social media. It is a deeply engaging way for visitors to interact with cultural heritage, based on emotion, playfulness and curiosity. The Pilot received a lot of media coverage since its launch in May 2014, including a feature on the BBC breakfast TV where the hosts themselves recreated a painting. There is also an “Embed VanGoYourself On Your Site” widget available¹⁸.



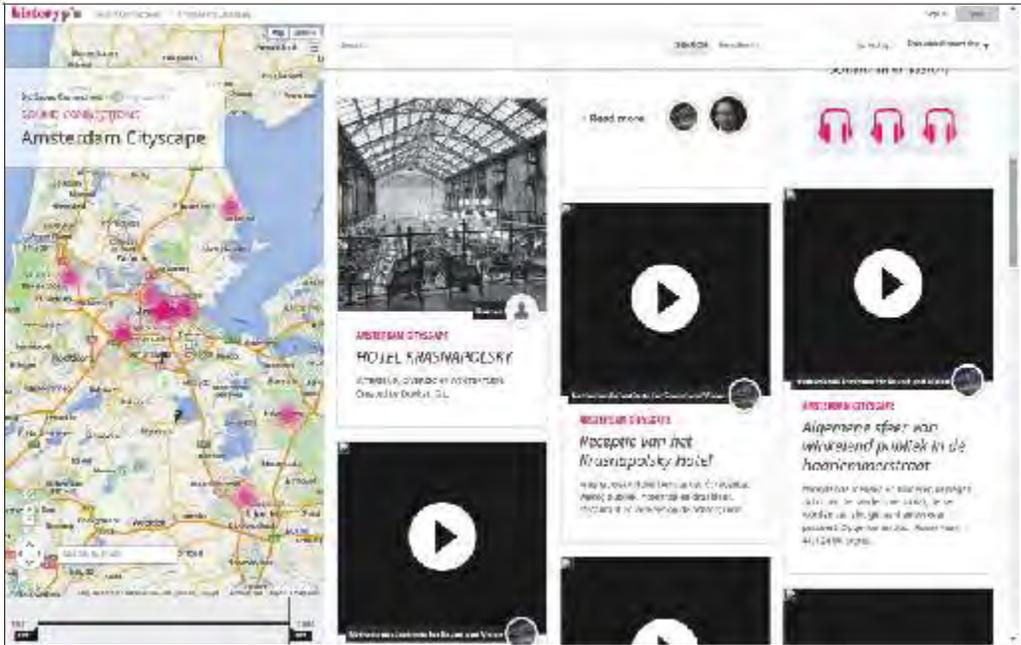
Tourism Pilot:
 VanGoYourself
 (CC BY-SA
 Europeana Creative)

The Social Networks Pilot “Sound Connections”¹⁹ led by the Netherlands Institute for Sound and Vision (NISV) is a flexible tool for communities of interest to enrich specific sets of sounds in different ways on the themes of aviation, city soundscapes (London and Amsterdam), and birdlife. It features geo-tagged sound files from the collections of NISV and the British Library, which are displayed on the social engagement platform Historypin, developed by [Shift](#)²⁰ (formerly We Are What We Do).



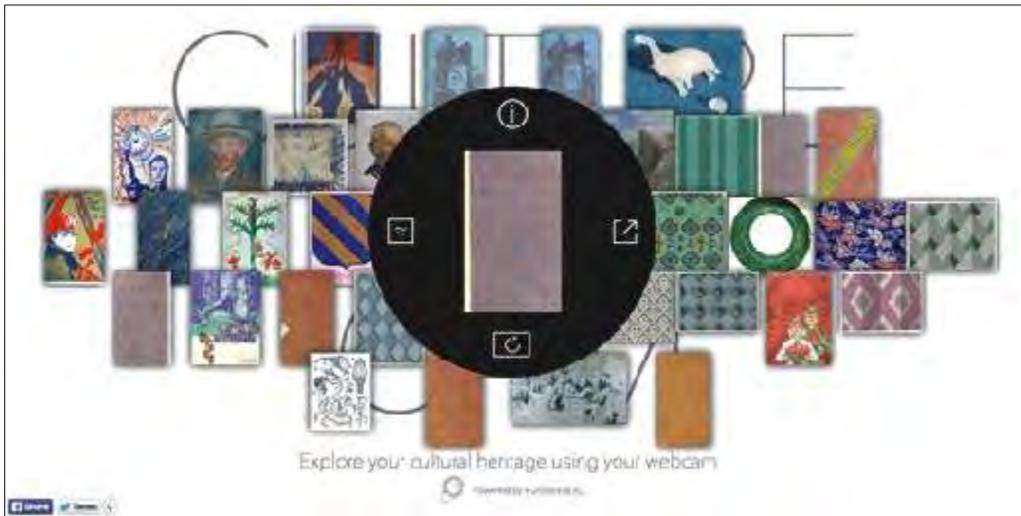


Social Networks
Pilot:
Sound Connections
- Amsterdam
Cityscape
(CC BY-SA
Europeana Creative)



The Design Pilot is led by [Aalto University](#)²¹. The prototype is called “[Culture Cam](#)”²² and is based on a twofold concept consisting of an online search tool and an interactive installation exhibition. Culture Cam is a webcam-based similarity search tool offering designers, artists and all creative people the possibility of exploring cultural heritage images on Europeana in a fun, playful and intuitive way. It uses a web camera to match the colour, shape or pattern of an object to those in Europeana²³. The interactive installation was featured in May 2015 at the National [Gallery of Denmark](#)²⁴ as part of the popular SMK Friday events²⁵.

Design Pilot:
Culture Cam
(CC BY-SA
Europeana
Creative)



Lizzy Komen, Andrew Kitchen, Europeana Creative: Where Cultural Heritage and Creative Industries Meet to Re-Use Europe's Digital Memories



All the Europeana Creative Pilots are featured on Europeana Labs, including links to the applications and source code²⁶.

b Challenges

The pilots presented a picture of re-use that was less natural, in that Europeana Creative invested a great deal of time and effort to co-create, design, and implement fully working examples within the framework of the project. Whilst this was valuable, the project team were very interested to see what others could do in a natural environment. Therefore, five “Open Innovation Challenges” were created, one following each of the five project themes, which were open to any individual or company wanting to express their creativity in re-using cultural heritage content from Europeana. A productive prize was offered for the winners of each Challenge, rather than simply giving away money. Each would have the opportunity of working with a range of experts hailing from the cultural, business, and creative sectors in order to help expedite the development of their concept – a process known as business incubation²⁷. The Challenges were coordinated by the European Network of Living Labs (ENoLL) and the incubation programme by Ramulus.

The Challenges had a number of aims. The project team wanted to connect the creative industries²⁸ with Europeana through raising awareness of the possibilities for collaboration and fostering an environment for re-use of cultural heritage content. One of Europeana Creative's core project aims was also being tested through the implementation of the Challenges. This was to demonstrate that return on investment was a feasible reality for the millions of Euros spent on the large digitisation strategy implemented within various European Commission funded framework programmes. The realism element was, therefore, an important factor. Each Challenge was run as a competitive process. Each applicant had to submit a range of information that helped scope and contextualise their concept for the judges to consider. This information included an overview of their innovative idea, its market potential, and its innovative properties. They were also asked to supply real business documentation that required much more thought.

Each applicant was asked to produce a Business Model Canvas²⁹ (BMC), a useful and succinct way of expressing a business model on one page. It is actually quite hard to produce a good BMC, but doing so takes the creator through a series of thought processes that challenge the concept and forces consideration of factors one might overlook. Applicants were also asked for a financial forecast so that we could gain a high level understanding of what costs might be incurred and the estimated revenue that could be generated. This, along with further documentation, gave us sufficient intelligence to deduce whether the applicants had given sufficient thought to their concept and how realistic a prospect it would be to create an economically sustainable business. The wording just used is actually crucial – the phrase “profitable business” was quite deliberately not used. Profitability for shareholders, although it might make a great story, is not the definitive end game sought as it implies a highly commercial approach that may not be well suited to businesses re-using cultural content. This will be returned to later in the article as it is an interesting point to reflect upon. For now, it is safe to assume the project's definition of an economically sustainable business is an entity that is freestanding, functions through some revenue source, and does not go bankrupt.





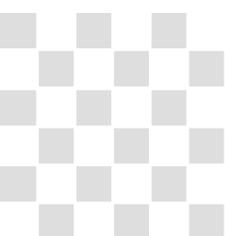
After undertaking an evaluation process, a number of applicants were shortlisted for each Challenge and each was asked to pitch³⁰ their business concept in front of an audience and project judges at events in either Brussels, Barcelona, or Manchester. For inexperienced individuals or first time entrepreneurs, the prospect of pitching an idea can be quite daunting, but the majority of the pitches were a credit to those presenting. The judges used the pitches and the knowledge of each application during a deliberation process before choosing their winners. One of the key factors in this deliberation process was the viability, appropriateness, and scalability of Europeana content re-use. Some very useful conclusions were drawn from this process concerning the knowledge the applicants had of Europeana and what could be found within it for re-use. This will be covered later in the article.

In all, seven winners were chosen over the five different Challenges. There were three covering the Natural History and History Education themes, two for the Tourism and Social Networks themes, and a further two for the Design theme. The winners varied in the type of application proposed, the extent of content re-use, and overall format. Some winners were actually existing products or services seeking adaptation to incorporate Europeana content, whilst others were completely new to market. A brief showcase for each of the winners now follows.

Firstly, there were the three winners from the Natural History and History Education Challenges.

Trimaps³¹ is an existing web application from Belgium whose concept is very simple - find yourself a digital map, upload it to the Trimaps server, go through a process of mapping geographic locations on the uploaded map to actual locations on Microsoft Bing Maps (known as georeferencing) and publish the result. It was intriguing what this then allowed the user to do. If the user visited the Trimaps webpage for the published map they were actually able to navigate it using a GPS enabled device, such as a smartphone or tablet. Of course the user would have to be in the geolocation of the map that was uploaded for this to work! The application is practical and applicable to a number of different market sectors but Jonathan Fallon, the owner of the concept, wanted to make a new product focused on education so that teachers could use the application for field trips. He wanted to re-use historical maps from Europeana to “power” this idea.

History Education Challenge winner: Trimaps - website screenshot (CC BY-SA Europeana Creative)



Lizzy Komen, Andrew Kitchen, Europeana Creative: Where Cultural Heritage and Creative Industries Meet to Re-Use Europe's Digital Memories



Pathways³³ is an existing application from a company in Greece, called AGRO-KNOW, that needed assistance to re-work their concept within the context of education and natural history museums. This concept concerned the idea of producing “pathways” for teaching and learning when school groups visited museums. At a high level, the application would allow the user to create learning pathways, populate them with content (from Europeana and other sources), define learning goals, and enable a learner to follow a route through the museum to activate the learning (the pathway). To help visualise this concept, just think of a learning track such as evolution and how one could follow a pathway through a museum to learn key facts, compare points of evolution, and enjoy the experience.

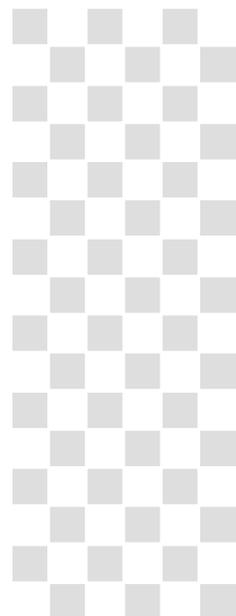
Zeitfenster³⁴ (or time window in English) is an existing augmented reality app from a start-up business in Germany. The app uses textual data, video and photographic content, location based data, and the camera on a smartphone or tablet. It provides an interactive experience for the user to superimpose and fade in and out a historical photograph or video over the present day view displayed by the camera. This gives the impression of a “time travel window” through the camera! The app is suitable for institutions or cities to have their own white-labelled version that can provide educational and touristic benefits. The core idea from the Zeitfenster team was to expand their app’s content collection by utilising Europeana’s content and look for opportunities to expand their footprint within European cities outside of their home country.



History Education
Challenge winner:
Zeitfenster -
website screenshot
(CC BY-SA
Europeana Creative)

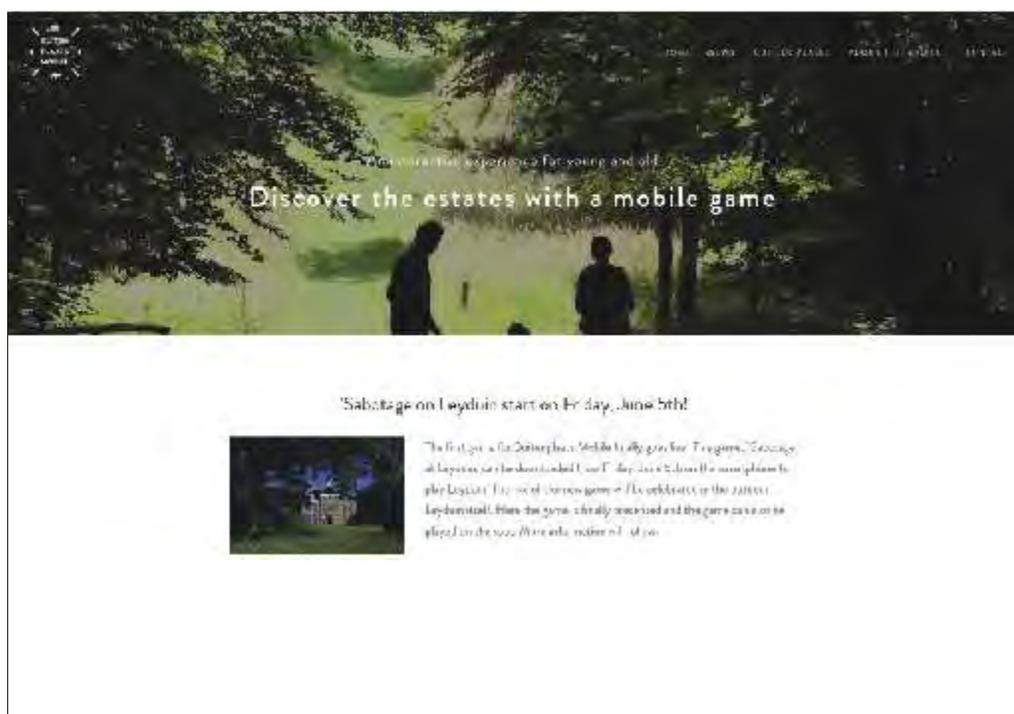
Secondly, there were the two winners from the Tourism and Social Networks Challenges.

Buitenplaats Mobiel³⁵ was the first entirely new project Europeana Creative supported, and is the creation of Jennemie Stoelhorst from the Netherlands. She is in the process of designing education based treasure hunts for children who visit a number of Buitenplaatsen (or *historic*



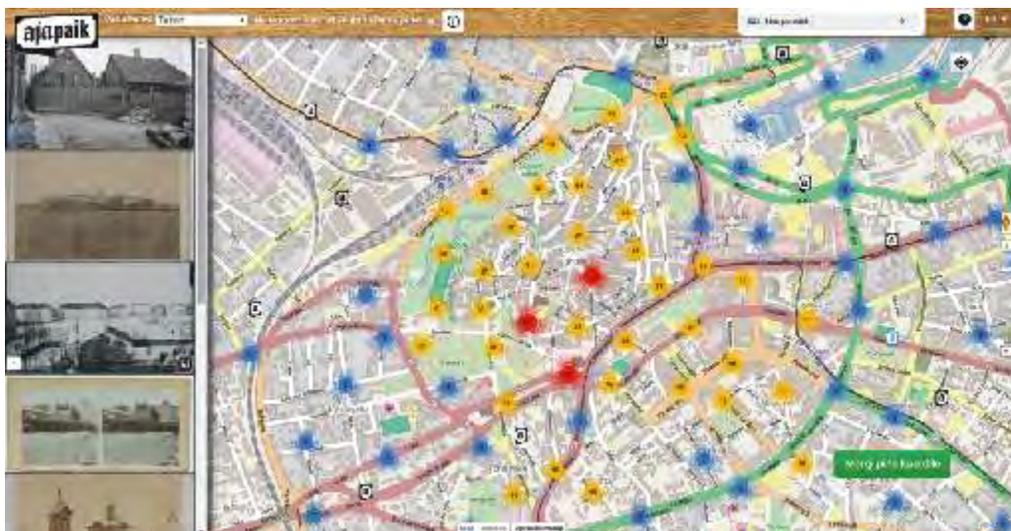
country estates in English). The concept takes an activity based learning approach, where GPS enabled devices, such as smartphones or tablets, interact on a proximity basis with Bluetooth signal emitting beacons positioned in the grounds of the Buitenplaatsen. Each treasure hunt follows an interesting story and aims to get the children to explore the Buitenplaatsen, learn some of the history, and have great fun! The Europeana re-use comes into play in the pre- and post-visit learning opportunities afforded by school visits and through embedding rich content within the treasure hunts.

Tourism
Challenge winner:
Buitenplaats Mobiel
- website screenshot
(CC BY-SA
Europeana Creative)



Ajapaik³⁶ (or *Timepatch* as an English name equivalent) is an existing web application from Estonia founded by Vahur Puik, which utilises “the crowd” to enhance a photograph or illustration’s metadata. These types of content often lack useful information, such as location-based data, which can be essential for many types of re-use. The application uses the crowd to determine the location (georeference) and angle of orientation (azimuth) from when the photo or illustration was created and adds this information as geotags. It also encourages the user to undertake further textual based curation activities and to upload present day photographs taken from the same location and azimuth (called “re-photos”). Users complete such tasks and score points, which all go towards their standing on the Ajapaik leaderboard. Ajapaik wished to re-use content from Europeana from major cities and begin to build communities of users from those locations to take on the curation tasks.

Lizzy Komën, Andrew Kitchen,
 Europeana Creative: Where Cultural Heritage
 and Creative Industries Meet to Re-Use Europe's
 Digital Memories



Social Networks
 Challenge winner:
 Ajapaik
 – website
 screenshot
 (CC BY-SA
 Europeana
 Creative)

Thirdly, there were the two winners from the Design Challenge – both of which are new products to the market and in the early stages of development.

Gallery Dynamic is a service that will be delivered to businesses, potentially anywhere and of any size, by Alistair MacDonald's company based in the United Kingdom. The concept here is quite simple but very compelling. Have you ever noticed the awful posters and other “art” on the walls of office buildings or the muted news channels playing on LCD screens in company receptions? This should and is hopefully about to change with the inception of Gallery Dynamic. The service will install low powered LCD screens that bring varied art and culture to the workplace through the display of curated collections. Galleries loan physical artwork, so why not transform this approach and have digital versions on display in more places to spread our cultural heritage? Gallery Dynamic will be using curated content from Europeana and other sources in the rollout of their new service.

Public Domain City³⁷ (PDC) is an innovative idea pioneered by Silvija Aurylaite from Lithuania. There are very large Public Domain collections held by many of the large libraries in Europe. Much of the content consists of digital scans from books long out of print and copyright and generously donated for use without commercial restrictions. There are many curious and intriguing images buried within these scans, which are predominantly of insufficient quality (resolution and clarity) to be directly re-used by the creative industries. PDC's mission will be to identify such curiosities and create fabulous curated collections of them that are searchable and safe to re-use by creative professionals. Additionally PDC will offer an added value service to extract the images from the original scans, digitally retouch them and create new more re-usable versions. These new versions shall breathe unforeseen new life into some of Europe's historical bibliographic collections. Silvija and her associates will use some of the great Public Domain collections within Europeana to create the curated collections at PDC.



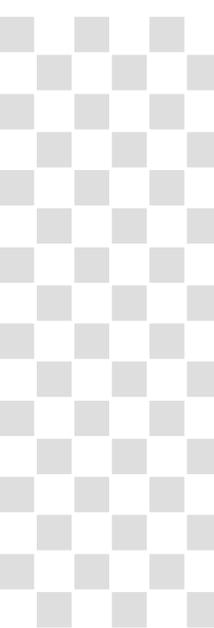


Design Challenge
winner: Public
Domain City
- the process
(CC BY
Silvija Aurylaite)



As can be seen from the range of business concepts and approaches detailed above, there have been some interesting outcomes from the five Challenges. There is great potential for cultural heritage re-use by each of these new businesses, especially those where the focus is on active interaction with the content as a primary activity – as in Public Domain City’s case. The Challenges certainly showed our project that the design community were very strong potential re-users and collectively had the most promising creative ideas during the submission process. It definitely makes sense for Europeana and its network of partners to progress collaborations with creators and designers as a primary audience.

The incubation process started with these businesses in 2014 with the first group of winners joining our programme in May 2014, the second in September 2014 and the third in February 2015. It has been a tricky process and a number of factors have presented difficulties to overcome. This was not unexpected, as it was the first time such a programme of work has been attempted and Europeana Creative is a highly diverse, complex and ambitious project to undertake. The lessons that have been collectively learned are valuable and will prove useful for sister projects attempting similar aims, such as Europeana Food and Drink and Europeana Space. The legacy of this project needs to run longer than just imparting good practices and lessons learned to sister projects though, and this is something that the project team will be working on further before the project ends. There is still much to do on Europeana Labs to support creative individuals, and there are a range of improvements planned that will really help define Europeana Creative’s legacy as the project that kick-started the conversation between cultural heritage and the creative industries.



Lizzy Komen, Andrew Kitchen,

Europeana Creative: Where Cultural Heritage and Creative Industries Meet to Re-Use Europe's Digital Memories

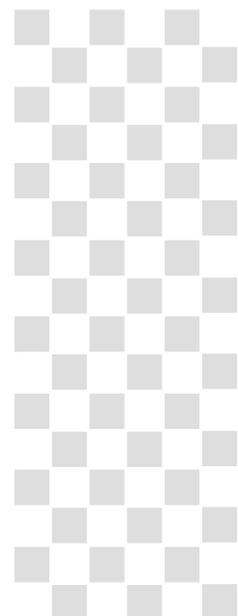
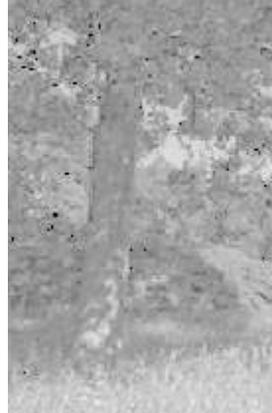
Conclusion

So what are some of the key lessons that have been learned from this exciting project? It is certainly clear that a range of innovative ideas are forthcoming from the creative industries and this project has given only small a glimpse of what the future could hold for productive collaborations. Much has been made of tools, games, apps and the like that have been made during hackathons in the past but many of these cease development soon after the event. There needs to be a much greater importance given to increasing the conversion rate of turning these bright ideas into demonstrable revenue generating businesses. Having fun over a couple of days with a gang of developers to create something interesting is important to generate creative outcomes, but it is not sufficient to rely upon such gatherings to build the cultural and creative economy. Likewise, this project has shown fledgling businesses need significant mentoring and a range of supporting measures to give creative individuals the confidence to take a bold step, form a real business, and follow their convictions.

If we look at the generation of innovative ideas between pilots and Challenge winners, there seems to be a clear difference in the process and approach. The pilots started with a co-creation workshop, where project partners with different experiences and skills helped with developing realistic concepts and forming cross-discipline teams for taking things to the next level. In this way, collaboration between professionals from the cultural sector and creative industries was fostered at the inception phase, which was then brought forward with the help of EU funding. There was time to investigate relevant content, develop a sustainable business model, and provide technical support where needed. With the Challenges, the use of cultural heritage materials or collaboration with heritage organisations came into play during the incubation phase. In some cases, the ideas that came out of the Open Innovation Challenges tried to implement relevant content in an existing service; in other cases there was already a predefined idea about the content for re-use such as with PDC. Indeed, it is not always necessary to involve the organisation that has provided access to the digital cultural heritage content, but it would be interesting to see how cross-discipline collaboration can be further facilitated through the co-creation process. This may well help alleviate some of the skill and experience gaps that were evident in the incubation programme and could realise a reduced lead-time to market and an improved product.

With regard to the cultural content within Europeana, the project team has also acquired a number of crucial pieces of intelligence. Discussion with representatives within the creative industries has resulted in clear direction with regard to the quality thresholds for content that is made available, as well as the need for clear license terms (free at the point of use and rights cleared is most desirable). The Europeana Publishing Framework will go a long way towards meeting their requirements, and will constitute one of the most important outcomes of the project.

When working with the Challenge winners, a barrier to progress that came to light was the difficulty they were having to understand what was inside Europeana. The 40m+ objects do pack a "wow factor", but in reality the winners were struggling to break this enormous content mountain down in order to identify what would meet the needs of their product/service. With

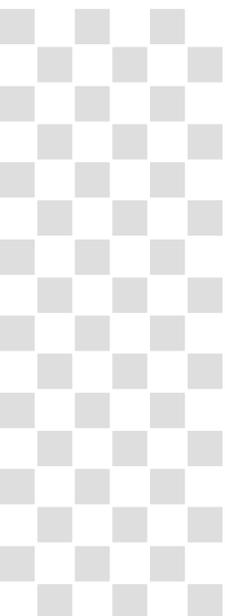




this and similar feedback from other parties as a key driver, Europeana was able to set about explicitly identifying collections of content that could be featured within Europeana Labs, and the Data gallery was born. Whilst this is a great start, curating appropriate content collections for re-use is highly time-consuming and is not something scalable without the assistance of the crowd. This is something that needs to be explored beyond the end of the project.

Earlier in the article a profitability versus economic sustainability conundrum was mentioned. The impression many creative individuals may have is that a business needs to focus on making profit, and this can be a real disincentive if you are not profit focussed. Actually, the truth is there are different forms of business and some, such as Social Enterprises³⁸, focus on supporting philanthropic or socially beneficial aims rather than pleasing profit-minded shareholders. It should be noted that it stills means the business has to have some form of revenue stream; otherwise it would still be economically unsustainable! Information about such business structures needs to be communicated to creative individuals to allow them to appreciate whether or not it could work for their idea and inspire action.

As participants in the project, probably the most overriding conclusion is the real need for a holistic ecosystem and end-to-end approach for activating productive and exciting future collaboration between the cultural and creative sectors. This project has touched upon various points of this end-to-end approach, such as co-creation methodology, supporting infrastructures (technical and business oriented), and networking. However, there are more things to do in each area and other parts of the jigsaw puzzle need to be introduced to increase the chances of success. We are not there yet by any means, but the journey has started and we know where we are heading. Hopefully you, the reader, will be part of this to help us collectively reach our destination.



Lizzy Komen, Andrew Kitchen,

Europeana Creative: Where Cultural Heritage and Creative Industries Meet to Re-Use Europe's Digital Memories

1. <http://cordis.europa.eu/fp7/ict/creativity/cip-programme-2012.pdf> , p.15
2. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>
3. <http://strategy2020.europeana.eu/>
4. http://pro.europeana.eu/files/Europeana_Professional/Projects/Project_list/Europeana_Creative/Deliverables/eCreative_Public_Report_Y2_v1.0.pdf, p.3
5. <http://pro.europeana.eu/get-involved/europeana-ipr/europeana-licensing-framework>
6. www.beeldengeluid.nl/en/blogs/research-amp-development/201403/europeana-gets-creative
7. www.beeldengeluid.nl/en/blogs/research-amp-development/201403/europeana-gets-creative
8. www.euroclio.eu/
9. Historiana is a long-term programme coordinated by EUROCLIO. In this programme, EUROCLIO supports a community of professional volunteers who are history education specialists from more than 30 different countries, working together to provide access to high-quality resources for history, heritage and citizenship education. The resources are selected, developed, and tested in order to promote active learning, historical and critical thinking, and multiple perspectives on history. The Historiana website can be accessed at www.historiana.eu.
10. http://pro.europeana.eu/files/Europeana_Professional/Projects/Project_list/Europeana_Creative/Deliverables/eCreative_Public_Report_Y2_v1.0.pdf
11. www.nm.cz/
12. http://pro.europeana.eu/files/Europeana_Professional/Projects/Project_list/Europeana_Creative/Deliverables/eCreative_D4.3_NMP_v1.0.pdf p.9
13. <http://labs.europeana.eu/apps/secretlegacy/>
14. www.exozet.com/
15. www.semantika.si/
16. www.vangoyourself.com
17. www.plurio.org/
18. <http://vangoyourself.com/embed-van-go-yourself-on-your-site/>
19. www.historypin.org/en/explore/sound-connections
20. www.shiftdesign.org.uk/
21. www.aalto.fi/en/
22. www.culturecam.eu
23. <http://pro.europeana.eu/europeana-creative/europeana-creative-blog/finding-beauty-in-the-world-of-europeana-the-europeana-creative>
24. www.smk.dk/
25. <http://www.smk.dk/en/visit-the-museum/calendar/begivenhed/aktivitet/smk-fridays-20/>
26. <http://labs.europeana.eu/apps/#tag=pilot>
27. <http://pro.europeana.eu/blogpost/what-is-business-incubation>
28. http://en.wikipedia.org/wiki/Creative_industries#Definitions_of_the_creative_industries
29. <http://www.businessmodelgeneration.com/canvas/bmc>
30. <http://www.entrepreneur.com/article/201826>
31. <https://trimaps.com/>
32. <https://www.bing.com/maps/>
33. <http://www.agroknow.gr/agroknow/portfolio/natural-europe-educational-pathways-tool-online-educational-activities-creation-tool>
34. <http://www.zeitfenster-app.de/>
35. <http://www.buitenplaatsmobiel.com/>
36. <http://ajapaik.ee/>
37. <https://www.facebook.com/PublicDomainCity>
38. <http://www.socialenterprise.org.uk/about/about-social-enterprise/FAQs>

