Spaces of possibilities: the Europeana Space Project

Over the past ten or fifteen years, museums and memory institutions have invested a great deal of human and financial resources in the digitisation of heritage treasures. Digital-born objects and art further enlarge this pool of intangible heritage stored in offline and online databases and on Internet platforms. For memory institutions, this cornucopia of digital heritage content can—with the right tools and strategies—be of immense benefit when it comes to showcasing collections, telling stories, teaching and entertaining audiences, and reaching potential new visitors and users.

Europeana Space, an international networking project co-financed by the European Commission, developed a range of resources for the creative re-use of digital cultural heritage content, available on platforms like Europeana. The project brought together key high-level expertise from the European creative industries, technology-based enterprises, the cultural heritage sector, and higher education to build virtual and physical environments (Spaces) where stakeholders and creative entrepreneurs can experiment with digital content and new tools to create opportunities for employment and growth within the creative industries. Furthermore, guidelines on Intellectual Property Rights (IPR) management, business development, and teaching modules offer additional support to aspiring start-ups and developers. Hackathons organized in the context of the six project pilots (Museum, Photography, TV, Games, Open & Hybrid Publishing, Dance) inspired and assisted content providers, creators, and industry bodies to develop innovative content-based services and applications to stimulate the use of Europe’s rich digital cultural resources.

This article presents three applications developed by the E-Space project. All three programs are currently available as open-source software; links for downloading the applications may be found on the Europeana Space platform: http://www.europeana-space.eu/
**Blinkster: a visitor application for museums**

A multimedia smartphone application aiming at small and medium-size heritage institutions wishing to create their own visitor application is Blinkster. The app gives museum professionals and curators the freedom to create visitor services especially designed for visitors’ needs. Blinkster was developed by the consulting company Eureva (France) and enhanced and tested within E-Space.

Blinkster consists of two apps: one allows museum professionals to add and edit content; the other provides museum visitors with a range of multimedia services for content discovery. Blinkster brings the audio-guide experience to a whole new level by uniting educational and entertaining features. The visitors of museums and cultural heritage sites that offer the Blinkster service are requested to download the app prior to their visit. The application comes to life when the visitor takes a picture of the object she or he is interested in.

Depending on the information provided by museum professionals, visitors can then find additional material and services, such as multilingual texts, audio and video files and
Useful links to databases; portals and external websites like Europeana, Wikipedia, and YouTube; and additional material including historic photos, plans, sketches, archival material, and so forth. The Blinkster experience can also be taken one step further by offering tours and quests for different age groups. Quizzes and clues can be added to the Blinkster application, too, and will guide visitors from one object to the next.

The same approach can be used for telling a story about certain objects in the exhibition. Blinkster makes it easy for museum curators to spin their own story around objects. In that way it is not only possible to present different stories, that could—due to a limitation of physical space in a museum building—have never been told otherwise, but also to highlight objects, present museum treasures from a different perspective, and to even offer educative or entertaining tours for children, teenagers, and grown-ups. Thus, the Blinkster app for mobile devices can be understood as a bridge going from the analogue to the digital and back again to the analogue world.

The digital, mobile component adds an individual spin to the traditional museum experience by personalizing visits and engaging visitors. No longer do visitors only read information material displayed on museum walls and small signs. By using the Blinkster app, visitors can search and share, play and engage with content; hence they have a multi-faceted, interactive museum experience.

For museums and other heritage institutions, visitor apps like Blinkster come with the obvious advantage that devices such as audio guides or printed handouts no longer have to be provided, as the visitor is using her or his own portable device. Moreover, the Blinkster solution is much more flexible. New content, either from the museum’s own database or from other open-source portals can be uploaded to the editor’s CMS quickly and is available within seconds. The only thing curators and heritage professionals may want to consider when implementing Blinkster is the availability of a stable and relatively fast Internet connection in the exhibition space. For all heritage institutions on a budget, Blinkster is a flexible solution to bring their exhibition from analogue to digital with only a few clicks.

The Blinkster promotional video and further information can be found on the Europeana Space website: http://www.europeana-space.eu/blinkster/
Toolbox: Unlocking the Educative Potential of Digital Cultural Heritage

That open-source digital cultural content is well-suited for educational purposes is a claim heard quite often in all areas of culture, humanities and schooling. However, to make use of the richness of digitized cultural heritage in kindergartens, schools, universities, museums, memorials, and so on, tools are required that facilitate the integration of digital content into everyday educational practices. Without well-tailored, flexible tools the potential lying within the digitized material available in online databases and on platforms cannot be fully unleashed.

The Europeana Space Toolbox developed by project partner Museumsmedien (Germany) as part of the Museums Pilot is such a set of tools that makes exploiting the copiousness of digital cultural heritage easy. The Toolbox helps curators and educators to create and update worksheets, edit storyboards for media production, and prepare promotional videos. Content from local storage media can be combined with open-source content platforms like Europeana and uploaded directly. With simple drag and drop, a template

Fig. 2. Pop-Up Museum: Dutch State Coal Mines, displayed at Cultuur in Beeld conference on 7 December 2016, image courtesy of NOTERIK
can be filled with new items. The created worksheet is ready to use—for example, to be printed for a guided tour, or to be sent as a digital file.

Based on an open source data and content management architecture, the Europeana Space Toolbox is an ideal solution for smaller and medium sized institutions with limited resources of staff and money. Content can be presented more effectively and used and reused by museum staff, creative partners, and educators in developing new educative products in a few easy steps.

Follow the link to learn more about the Europeana Space Toolbox [http://www.europeana-space.eu/toolbox/](http://www.europeana-space.eu/toolbox/)

**The Europeana Space Pop-Up Museum: Engaging With Digitized Art and Culture**

The idea for the Europeana Space Pop-Up Museum was born after the completion of the six thematic E-Space pilots. Bringing together and remixing E-Space tools in one innovative product was seen as a good way to provide an open-source tool that combines the best of Europeana Space and promotes the creative and educative re-use of digital cultural heritage content. A central aspiration of the Pop-Up Museum is to give digitized and digital art and culture a new home in public and private spaces like train stations,

Fig. 3. Pop-Up Museum: Guess which fashion era/ From past to present/ Timeless Icons, displayed at Sound and Vision, from 12-19 January 2017, image courtesy of NOTERIK
squares, hotel lobbies, waiting rooms, entrance halls of universities, festivals, shopping malls, and so on.

The exuberance of open-source high-quality, high-resolution digital content makes it possible to tell captivating stories, to teach and entertain people, whether waiting or on the go, and eventually bring a piece of art and cultural heritage into their lives. Like similar concepts (e.g. pop up stores), Pop-up Museums are temporary, flexible installations that sample a certain topic or story to attract and delight users and to make them curious to see and learn more—for example, by visiting a museum, exhibition or heritage site from whose collections digital objects were selected.

To make setting up and running the Pop-up Museum as streamlined and economical as possible, the Europeana Space Pop-up Museum concept is composed of an easy-to-use CMS. A web-based editor facilitates uploading and managing content. A simple pairing system makes displaying content on the Pop-up Museum’s monitors convenient. Only one single Internet-capable screen is needed to implement the Pop-Up Museum. However, to make the user experience more immersive, multiple screens are recommended. In that way, users can interact with each other as well as with the content offered in the Pop-Up Museum.

The user’s mobile phone functions as a remote control for the programs. No app needs to be installed on the phone, and no registration is required. Eyes on the big screens, users can immediately dive into the high-quality art displayed: they can view and listen, zoom and swipe, search and discover. Furthermore, high-resolution content allows users to discover details in pictures and enjoy a novel perspective on art. Artworks can be displayed successively or side by side, and layering of image sections is also possible.

Multimedia material can further enrich the presentation and support the formation of stories. An interesting storyline embedded into the Pop-Up Museum’s presentation is beneficial for bridging the gap between objects and visitors. Compelling and emotionally engaging narratives, gaming elements, and interactive functionalities (enabled by the user’s mobile phone) elevate the Pop-Up Museum experience from a mere consumption of images to a personalized activity of engaging with other users and the digital objects shown on the screens. The Pop-Up Museum is not meant to compete with a museum or
an exhibition. On the contrary, it serves as an extension of the physical museum space that is suited to reach into public or private spaces and thereby attract new audiences.

More information regarding the Pop-Up Museum and developer NOTERIK (The Netherlands) can be found on the Europeana Space website: [http://www.europeana-space.eu/pop-up-museum/](http://www.europeana-space.eu/pop-up-museum/) as well as under the following link: [https://www.mupop.net/](https://www.mupop.net/)