Europeana: Aggregating Cultural Diversity in Unity

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ABSTRACT

Kajian ini membahas tentang Europeana, sebagai agregator data warisan budaya Eropa. Tujuan dari tulisan ini adalah untuk mengeksplorasi platform Europeana dan hubungannya di bidang yang lebih luas dalam kaitan ilmu informasi, budaya, dan humaniora digital. Tujuan dari penelitian ini adalah untuk memberikan gambaran tentang perkembangan Europeana dan menunjukkan perubahan signifikan pada platform tersebut. Pendekatan kualitatif digunakan dalam penelitian ini secara deskriptif dan observasi langsung ke situs Europeana, bersama dengan tinjauan literatur yang dilakukan sebagai teknik pengambilan data. Penelitian ini menemukan bahwa Europeana mengalami signifikansi dalam pengembangan dan memiliki berbagai tujuan, tetapi yang lebih penting untuk ditekankan di sini adalah pada proses pembuatan, produksi dan distribusi konten warisan digital di Eropa. Kesimpulannya, Europeana memiliki efek signifikan pada keberlanjutan warisan budaya melalui kerja sama yang erat dengan proses digitalisasi konten yang bertujuan untuk menyajikan pengetahuan tacit di ruang publik dan melestarikan objek warisan budaya.

This study examines Europeana, a European cultural heritage data aggregator. The purpose of this study is to explore the Europeana platform and its relationship in a broader field. The purpose of this research is to provide an overview of Europeana development and demonstrate the significant alteration in the platform. A qualitative approach used in this study is descriptive methods and direct observation to Europeana website, alongside with literature review was conducted for the data retrieval technique. The research found that Europeana experienced a significance in the development and has several objectives, but more importantly emphasized more on creation, production, and distribution process of digital heritage content in Europe. As a result, Europeana has a significant effect on cultural heritage sustainability through work closely with digitization to present the tacit knowledge in the public sphere and preserve cultural heritage object

Keywords: cultural heritage, digital aggregator, Europeana, digital humanities.

INTRODUCTION

The evolution of technology has changed people's way of life. As evidence, now we can see that everything is being digital. From picture, book, manuscript, or even music. Moreover, in this digital era, everyone uses more 'varied, extensible and multiplicative media' to communicate with each other (Burdick et al. 2012). The alteration from the usage of analogue data to digital data also triggered when digital humanities being invented. Digital

humanities are a blanket term covered a variety of activities, from 'data mining to online preservation' (Hong 2015) and all other thing relates to the engagement of human activities and computational work. This concept then inspires Europeana to provide a wide range of information related to the cultural heritage of Europe.

Europeana (www.europeana.eu/portal/en) is a digital platform focused on cultural heritage aggregating in Europe. European Union, as the main donor of Europeana, also encourage the discourse and observation related to digitisation and digital preservation through the policy. This condition is related to The Digital Agenda for Europe[1] which aims to maximise the usefulness of information technology for economic aspects, especially the creation of new jobs and quality of life for European communities, as part of Europe 2020 strategy (EuropeanComission 2011). Another important agenda that deserves attention is the accessibility to European cultural heritage content. Through this platform, users from all over the world can access information about European Culture with different kind of purposes.

This paper will explore the Europeana platform and its relationship with broader field and digital humanities particularly. Firstly, it will examine the development of Europeana and demonstrate the significant change within the platform. And then, we will look deeper into the implementation of the Europeana project.

LITERATURE REVIEW

The research in the digital humanities field related to library science has been done by many scholars. One of the authors, for example, Sabharwal (2015) discuss that among the digital humanities projects which involve archives and libraries is a collection of thematic research. Further, Palmer in Sabharwal (2015) called this "digital aggregation from primary sources" which can be developed by digital humanities scholars in collaboration with archivist and librarian. This notion connected to the circumstances that collections managed in the ICT era tend to be digital. The collaboration across the interdisciplinary fields is important to improve project development. Basically, digital humanities projects are interpreted as multiple scenarios for using archives and manuscript collections with varying extent of collaboration with archivists and librarians (Sabharwal, 2015)

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[1] The Digital Agenda for Europe was mentioned in Commission Recommendation of 27.10.2011 on the digitisation and online accessibility of cultural material and digital preservation. It can be acccessed on: https://ec.europa.eu/digital-single-market/sites/digital-agenda/files/en_4.pdf

As a digital object, Europeana has been studied by many researchers in the past. Gaona-García (2017) writes an article that aims to explore Europeana digital resources as open learning repositories in order to re-use digital resources to improve the learning process in the domain of arts and cultural heritage. Various studies can be conducted related to the project. However, this condition always depends on the author perspective in seeing the digital object.

METHODOLOGY

This study uses a qualitative approach with descriptive methods. Data collection techniques were carried out by direct observation on the Europeana website. The author also collected the data through literature studies. Research on a particular digital resource from the perspective of digital humanities field is a good first step to be discussed and can be a model in developing similar projects, especially in Indonesia.

DUSCUSSION

The Milestone of Europeana

The Europeana project was catalysed when Jacques Chirac, President of France alongside with six head of states[2] sent a letter[3] to the President of the European Commission in April 2005. The letter suggests to the European Commission to build a digital library consisting of Europe's culture and scientific data can be accessible for everyone (EuropeanCommission 2014). The aims for making the digital library platform are to make the 'European information resources' accessible for public consumption (EuropeanComission 2005) and promote Europe Culture. The European Commission response in a welcoming way, as the idea is strongly related with i2010 Digital Libraries initiative[4], which contains three key areas namely digitisation of the analogue collection, online accessibility and preservation and storage.

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[2] The other six states are German, Hungary, Italy, Poland and Spain.
[3] The letter of Jacques Chirac was written in French language and can be accessed on
http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=5978
[4] The i2010 Digital Libraries was published in 30 September 2005. See more on: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52005DC0465&from=EN

The prototype was developed in 2007 and after the long awaiting, the project finally being released on 20 November 2008[5]. It was running by the European Digital Library Foundation and hosted by National Library of the Netherlands, the Koninklijke Bibliotheek. There is over than thousand cultural organisations[6] providing around 4.5 million digital collections[7] aggregates from libraries, archives, and museums in Europe. Then, the collections are being classified based on nation, language, contributor, and data type (text, image, sound, and video). One year later, in 2009, the digital objects collection increase to 5 million[8].

Europeana is fully operating in 2010 (Nicholas and Clark 2014) after releasing Europeana version 1.0[9], a two and a half years' worth project that has more than ten million digital collections (Purday 2010). According to the Strategic Plan for Europeana 2011-2015[10], there are four main strategies in order to develop this portal (Europeana 2011). First and foremost, aggregate. Through aggregating collection from libraries, museums and archives across Europe, this platform has a desire to become a trusted reference source when it comes to European cultural heritage content. Europeana expanded the contributor network in order to collect more collection, varies from arts and crafts, maps and geography, photography, manuscripts and rare book collection, and even about natural history. The collected content was chosen thoroughly to represent the diversity of European cultural heritage. In addition, Europeana also made improvements to the quality of metadata. So that, the users can retrieve the information more efficiently. Second, facilitate. Europeana believes that 'culture transform lived'. Thus because, through culture, we can transfer knowledge, innovation, and policy. Scholars and professionals can share knowledge about their respective cultural heritage. This will lead to a significant increase in research and development in the application of digital heritage to support this, and policies are needed to regulate the continuity of Europeana. Third, distribute. In order to disseminate the information, Europeana continues to improve the platforms. To do this, Europeana customises the Open Data Search API and builds

[5] The early development of Europeana can be seen on "Background", accessed November 1, 2018, https://web.archive.org/web/20101225175701/http://europeana.eu/portal/aboutus_background.html
[6] "New Online: Europeana, Europe's Digital Library" Press Release, accessed November 1, 2018, http://europa.eu/rapid/press-release_IP-08-1747_en.htm?locale=en
[7] "Europeana Prototype Launch", accessed October 31, 2018, https://pro.europeana.eu/our-mission/history
[8] "Background", accessed November 1, 2018, https://web.archive.org/web/20101225175701/http://europeana.eu/portal/aboutus_background.html
[9] The information about the development of the prototype to a fully operated platform can be seen on "Europeana v1.0 project", accessed November 1, 2018, https://web.archive.org/web/20101218045037/http://version1.europeana.eu:80/web/europeana-project/
[10] Europeana Strategic Plan 2011-2015", accessed November 1, 2018, https://pro.europeana.eu/files/Europeana_Professional/Publications/Strategic%20Plan%202011-2015%20(colour).pdf

partnerships with public or private sectors. So that, the information can be retrieved easily by the users. Lastly, engage. Europeana encourages the users to also participate and collaborate in preserving their cultural heritage. Social media platforms have been used significantly as a platform to promote this program. In addition, Europeana also plays an active role as a bridge between content, curators, and users. This condition will lead to an increase in engagement rate within the platform. The development of Europeana not only focused on the collection acquisition, but also including upgrades in services, such as Application Programming Interfaces (APIs), virtual exhibitions and more user-friendly searching tools[11]. Through this advancement, the users can gather more information with more sophisticated user interface.

The release of a report about "New Renaissance" by Comité des Sages on 10 January 2011, emphasised on the advantages of providing more comfortable access to Europe's culture and knowledge (Sages 2011). Neelie Kroes as European Commission Vice-President for the Digital Agenda stated on the press release about triggering Digital Renaissance in Europe. This means, delivering the libraries and museums collection online not only will present about Europe's history and culture, but also boost education, innovation, and economic sectors.

The significant milestone of change can be seen in 2012. During this year, Europeana launched metadata, which is under Creative Commons CC0 1.0 Universal Public Domain Dedication (Vollmer 2012). This condition makes the metadata can be used freely by anyone with different uses, increasing the digital innovation and creativity opportunity.

Besides promoting Europe's cultural heritage, Europeana also has other objectives. The goals are to create a sustainable economic life and provide benefits through digital market opportunities in Europe. For that matter, Europeana emphasis on strengthening the creation, production, and distribution of digital heritage content. For example, to do the digitisation process, experts in that field are needed. This certainly has an impact on adding employment opportunities. Europeana can be a pioneer in disseminating digital culture content.

In 2015, Europeana relaunched its collection on the website, such as explore, exhibitions and blog within one place. And currently, in 2018, Europeana aggregate and disseminate more than 58 million collections ranging from artworks, books, artefacts, music and films from galleries, libraries, archives and museum from all over Europe. In order to make the collection more accessible to the users, Europeana platform keep improving the feature on the platform. During this year, Europeana has been done several things, including

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[11] Ibid.

published specific theme of manuscripts collection, established a new function to user contribution for Europeana Migration content, launched special unit for topics and people, updating the galleries and data filter, server migration. This condition is in harmony with Europeana 2015-2020 Strategy "We Transform the World" where users, contributors and Europeana unite to transform the world through culture.

For the plan in the future, Europeana aims three main goals, namely 'Unity in Diversity', 'Smart Inclusive Growth' and a 'Digital Single Market'. Europeana wants to raise the European identity awareness via cultural heritage, especially in European society. As a cultural practice, heritage will not only be a display in a site, but also broader function, which can be used for learning, work or even entertainment purposes. This condition is possible to do because Europeana has built and implemented sophisticated frameworks, standards, and technology. According to Europeana 2020 Strategy, there are three main priorities. First and foremost, simplify and benefiting Cultural Heritage Institutions to provide high-quality content. As a part of Europeana, Cultural Heritage Institution will reach and engage a broader audience with lower expense. Thus, with contributing to Europeana, the Cultural Heritage Institutions will gain more benefit, not only in lowering the charge in digitisation process, but also increase the digital content usage. Next, measuring the opportunity with partners in order to reach Europeana's target markets and audiences. The previous trend has been changed significantly with the way digital content work right now. Developing the partnership with researchers, creative industry, and education people, Europeana intend to aggregate more cultural heritage content across Europe. In addition, Europeana will focus on sectors that already have a fixed demand with more diverse users. This will help Europeana to measure the probability of benefit and avoid other losses that may arise in the future. The priority of Europeana is to develop and maintain large-scale media and distributions alliances with the organisation that has the same vision and mission. It is also important to have the partnership with companies with loyal users and interest in culture content. And lastly, engage Europeana's users through participation. A significant increase in access to Europeana collections will encourage users from the general publics to professionals to know the availability of information. Thus, Europeana needs to make improvements in data quality. So that, the users will find more content related to culture. For example, through Europeana thematic collections. The well-packed content from particular interest will attract more users and will continue to reach a broader audience if the content following the demand.

Europeana is aware that digital heritage plays a vital role in expanding a more comprehensive understanding of the culture itself and other cultures across Europe. Digital

heritage will also be benefiting another aspect as well, such as the creative economy. There is more than 90% of cultural heritage content that still in the original form (Europeana 2015). The remaining 10% is already being digitalised, but less than orty per cent is available to be accessed online. Europeana believes that through developing standards, using new technology and altering copyright will make a huge difference.

EDM: Balancing Metadata Tempo

The abundant number of objects in Europe's cultural heritage sites are being digitised by several organisations, from gallery, library, archive, and museum. They use various kind of standard in the metadata. However, as Europeana intends to become a platform that collects all those data, there should be the same standard that can be used by all parties. Another thing to note is that there should not be a duplication, as it will confuse the users when they retrieve the information within the platform. Thus, Europeana makes their own metadata model.

Europeana uses the Europeana Data Model (EDM) in order to standardise the data used within libraries, museums, and gallery that contributes to Europeana. EDM (Europeana 2017) is a medium to collect, connect, and enrich the descriptions of the content material that can be used in Europeana. The foundation of EDM is to have more diverse and universal metadata. So that, EDM is not developing on a particular community standard, but instead use an 'open, cross-domain-semantic web-based framework' in hope to accommodate various data (Europeana 2013).

To build this EDM model, there are several things that Europeana must pay attention. First, EDM must be able to distinguish 'registered objects' from existing digital forms, such as paintings, manuscripts, or films. Next, EDM should also provide more context in the metadata. The more context that can be captured by EDM, the more data can be collected by Europeana. This will lead to more people accessing Europeana, even though they have different interest. The impact of EDM will also enable the users to find more varied collection related to the digital heritage collection in Europeana. As a result, users will gain more interest in discovering more content through Europeana. This will certainly affect the number of visits to the Europeana website and increase the level of user's engagement.

In case of observing an object, EDM feature provides support to objects that strongly related with each other. When the users intend to search for an object within the platform, Europeana will refer to another similar object by providing the information on the metadata

object. Curious users will surely explore further information about those objects. This concept is closely associated with the indexing concept in the library. If there are two same titles in different form, when one of the collections is being opened, there will be metadata that will show similar object/object names.

EDM is the primary key to connecting, collecting, and improving metadata. The act was done by stand close to the modelling principles that support Web of Data or Semantic Web approach. At last, EDM will produce new knowledge within cultural heritage content delivery. EDM in Europeana will link to the Web of Data when it opens for the first stage. This means, the visibility and access to the cultural heritage material will escalate for the people who give their contribution. Europeana can become a potential new culture within Web of Data.

The amalgamation of objects, methodologies and tools can transform the way of digital heritage access. Digitising the real object and creating surrogates can minimising direct access to the fragile or endangered object. As a form of preserving cultural heritage, digitising brings new insight to changing the way we see history through heritage. The digital heritage is also limitless, regardless of time, format, geography, or culture.

Zooming In Through Europeana Feature

Europeana has four different functions that are divided into, discover, network, develop and connect. Through discover function, we can explore Europe's cultural heritage. From those different functions, only discover function that has its own website (https://europeana.eu/portal/en). Through the collections feature, we can explore all of the digital material from gallery, library, archive and museum across Europe continent. Europeana does not provide an official standard for defining cultural heritage. This is because every gallery, library, archive, and museum have its own principles. Therefore, discussions between the two parties are important before the collection is published to the general publics and accessed online. In terms of collection, Europeana only focused on the collection available within European organisation institution. This will include all the collection created and owned within the Europe region or anything about Europe. For accessing policy towards their digital collection, Europeana makes sure that the users do not need authentication or password. All the collections are free to access for anyone without a geographical barrier.

Europeana also has a concern about the importance of unique theme. Thus, this platform has a thematic collection, during World War I, between 1914-1918 time periods. In

the search button, the users can search any information related to untold stories and official histories about World War I. The users also can contribute to the platform and share their own story, picture, diary, or anything related to the event. On the other hand, regarding masterpieces and unpopular collection, Europeana is the right platform to promote the less popular collection. Europeana also does not make any prioritise to masterpieces or specific collection.

Next, network function which refers to Pro. Europeana aims to transform the world through culture. Pro make users and partner (in this case, European gallery, library, archive, and museum) can contribute as much as they can. This collaboration will help Europeana to preserve more cultural heritage content in digital form. While develop function refers to Labs and Connect refers to research. Both functions have the same tendency, which is research. The only differences are the target. Develop function focuses more on anyone who has an interesting idea and developing digital project, while connect features focuses more on academic research. In addition, Europeana also has their own blog (http://blog.europeana.eu/) which provides information related to the collections in more detail. So that, for those who are particularly curious about a specific object, they can browse through Europeana blog. However, because Europeana has many goals and different kind of website, it is hard for new users to access the desired information.

The first important aspect that being noticed by users when browsing through a website is a visual element, or better known as user interface. If a website has a simple and attractive user interface, this condition will affect the traffic of visitors. They will come to see the website and eventually ended up browsing more information about the content provided. However, if the website homepage is not attractive enough, users will leave the site immediately, unless they need to find the information on the website.

Europeana gives an outstanding example regarding the user interface. This platform continues to upgrade its appearance to make it look attractive to the user's eyes. In addition, Europeana is aware of the strength of its collection. The number of collections in the form of images, art, and photo is used as the front line to welcome users.
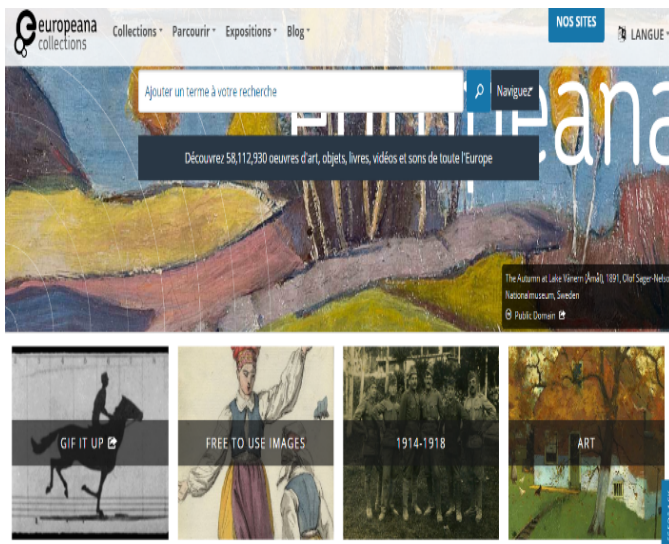
Figure 1: Europeana homepage

In term of information access, the Europeana website provides several collection subjects from different media. The language also has an important role in this site as over 26 languages are being used as the navigating language. The usage of EDM also helps Europeana to classify more than fifty-eight million collections. However, not all the text in the website changes to the language used. This can be seen in the collection metadata which will still use the original language. In the example below, the collection has the native language of Russian. When a user tries to use English as a navigation language, there is no change in the description metadata column. This condition will certainly affect the users who cannot speak other languages, besides their own mother tongue or English.
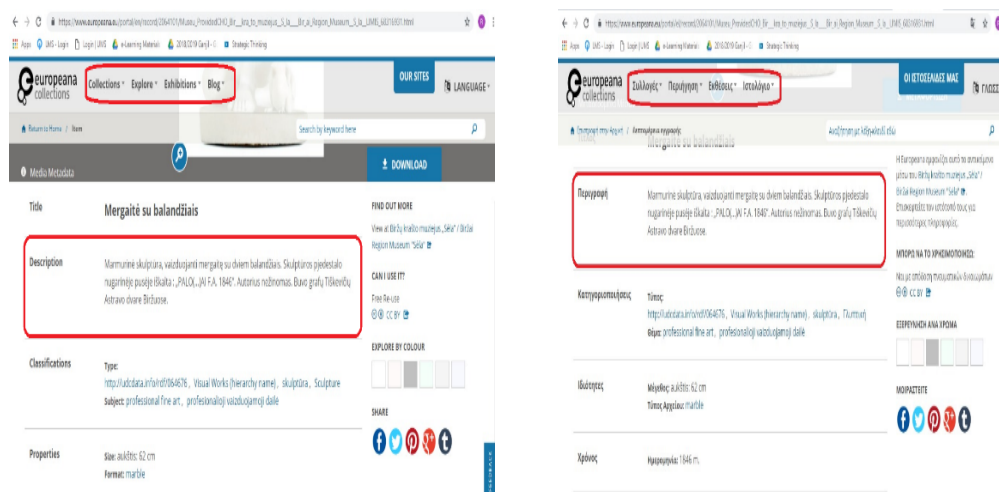

Figure 2: Browsing the same collection using two different languages

To do a comprehensive search, Europeana also provides explore mode. This model is a submenu that has been prepared by Europeana with various characteristics, such as colours, sources, topics, people, time periods, and gallery. Basically, this submenu is a suggestion from Europeana. However, Europeana did not randomly make a classification in explore submenu. Contributors to the most collections and the alphabet might be considered by Europeana while suggesting in exploring submenu.
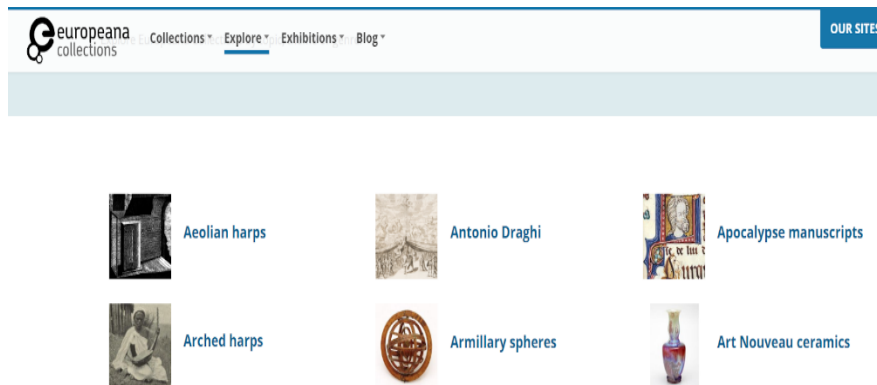

Figure 3: one of the classifications on explore submenu

While searching for the collection in this platform, the users might find several pictures that cannot be saved. This because, Europeana has a concern about the copyright issue of those collections. Europeana classified three copyright system, which are free to use, limited re-use, and no-reuse. Free to use mean no copyright. The object that classified as free to use does not have any restriction under copyright law. Users can copy, modify distribute, perform the work or even doing commercial purposes. All those acts do not need to ask for permission. However, it is also important for the users to seek information on whether persons have other rights related to the work, such as trademark right, patent or publicity and privacy right.

Then, limited re-use means that users are free to make a copy of the object and distribute the material to a different kind of medium and format. There should be following rules that need to be noticed. Users need to provide a credit to the license and indicate if there is any noticeable change. This included printing, share or duplicating the object for personal purposes. All other activities of material reproduction to the public depend on the licensing condition of the object. Users can use the object for private use. However, it is also clear that the users cannot use the digital object for commercial purposes. On the other hand, if the users make a significant change towards the digital object, the users cannot distribute the digital material in the public sphere.

And lastly, no-reuse which means that the collection has an in copyright. It means that the object is being protected with copyright. Users can access the object without paying anything, but to use the object in the public sphere, the users need to understand the copyright condition made by the organization. However, if there is no restriction stated on the licensing condition, users are free to do anything with the object according to the user's national copyright and rights act. This is certainly a visionary step to provide understanding to users, especially the public about copyright systems that apply in Europe.
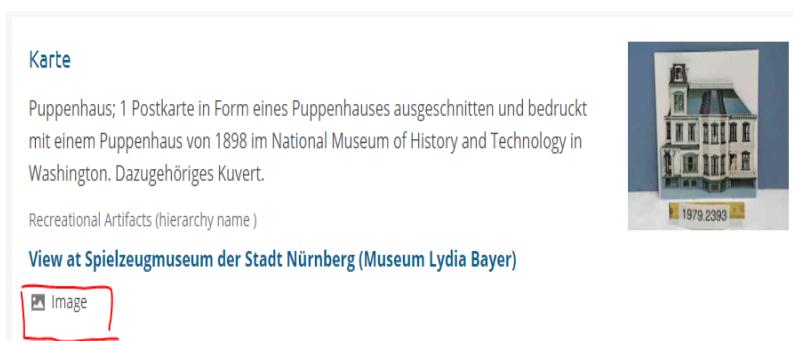

Figure 4: The example of the no-reuse picture collection

A picture is worth a thousand words. That is how old saying say when people talking about the picture. Europeana later saw this condition as an opportunity to introduce European cultural heritage through images. Every year, Europeana holds a competition called gift it up. Europeana users from various parts of the world can participate in this competition. The main idea of this competition is that participants use images available on the Europeana site and make it a .gif format or a moving image. The most creative one will be chosen at the end of the competition. The idea of making this competition is quite interesting as Europeana can gather a broader audience and promote Europe's rich heritage.

Figure 5: one of the picture used for gif it up competition

Europeana also has another way to reach a broader audience through the digital museum with making an exhibiton. The proliferation of technology does not only have an impact on information seeking behaviour. It also affects the way people see the museum. The combination of the Internet and mobile phones or personal computer make users can visit the museum without having to be in the museum physically. The users will also know what collections and stories are behind the collection. This is what is then called the digital museum. The idea of the digital museum has been going around as currently, many people are more immersed in the virtual world. In this case, Europeana helps the museum enthusiast all over the world to explore the museum's collection in Europe. It is also noticeable that exhibition is a common way in delivering more detailed information about specific objects, history, and the relationship between them. While making a virtual exhibition, Europeana not only use the picture, photograph, or image available on their database. But also, they have a collaboration with artist, painting, or curator to reproduce a new collection in order to give more exciting exhibition. The World War I picture below (see figure 6) is one of the reproduction products made by the famous painter. This exhibition also one of the thematic exhibitions, which only will be available on a certain period. Even though, Europeana also has fixed exhibition in their platform. At the end of the exhibition, there will be a small pop-up notification, where the users can give a rating to the exhibition performance. After giving the rating, Europeana will ask questions, and you can comment on the comment box. There are only two main questions that lead to what you like the most and does not like the most about the exhibition. After answering those two questions, it can be considered as a survey or evaluation for Europeana.

Figure 6: World War I Exhibition in Europeana

Lately, social media also become a public interest. More people are using the social media platform to connect and communicate with other people as well as sharing a piece of information. Looking into this opportunity, Europeana also has three main social media platforms, namely Facebook, Twitter, and Pinterest. Through this platform, Europeana actively promotes their new agenda and post interesting event. Social media platform is important in order to engage with a broader audience.

CONCLUSION

As a digital humanities project, Europeana does not only have an impact on cultural heritage sustainability. Europeana as a platform works closely with digitisation, a technology which is being used by human to shape the way we present our knowledge in public place. Europeana helps Cultural Heritage Institutions to preserve cultural heritage object directly. Through Europeana, people can access information in a more splendid way wherever they are. The improvements carried out continuously within the Europeana platform also making users comfortable while discovering and exploring the website.

Europeana also carries various impacts. This can be seen from the beginning of the prototype process until finally, Europeana became a huge platform. From technological aspect until the creative industry aspect. Collaboration between researchers, experts and users cannot be separated from the formation of Europeana. The usage of social media platform also needs to be considered as the way to promote European culture within a different platform. The way people use social media nowadays can become instructions for Europeana to embrace a broader audience. The continuing development in this project also shows that Europeana is consistent in making the content of Europe's cultural heritage accessible for everyone. Lastly, the development of Europeana can be used as a guide for similar platforms in developing repository features and collections.

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