



# **Deployment and Maintenance of Europeana DSI core services - SMART 2017/1136**

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**DELIVERABLE**

## **C.2 Users and usage report M15**

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<sup>1</sup> <https://pro.europeana.eu/project/europeana-dsi-4>

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# 1. Executive summary

Usage statistics show that traffic to Europeana Collections increased over time. Overall, we can see an increase by 9.6% comparing 2017/2018 and 2018/2019. The biggest increase was observed related to the publication and promotion of seasons, exhibitions and activities engaging users with cultural heritage (GIF IT UP). Main source of traffic remains organic search with multiple niche searches. This is a sign of a long tail-traffic over which we have limited influence.

Traffic coming from social media more than doubled between 2017/2018 and 2018/2019 as a result of adjusting the editorial strategy to seasons offering interesting curated and editorial content. While at the moment social media generates around 7% of traffic, the potential is high and we expect an increase, especially during the seasons.

Comparing 2017/2018 with 2018/2019 we gained returning users and new users. We are gaining more traffic but unfortunately new users very slowly convert into returning users. Even though there is no significant increase the analysis showed that the returning users we have are loyal and continue to come back to Europeana Collections regularly.

Europeana Collections achieved a very good NPS score, with an average of 38 in year one of Europeana DSI-4. Individual user feedback showed that users value the breath of digital collections on Europeana Collections. Users also mentioned high satisfaction with high quality content. On the other hand, users had difficulties to find content they like on Europeana Collections and suggested improved search and filter options. The last measurement done in November 2019 was lower than usual with an NPS of 17. We expect that with the release of the updated portal, the next NPS survey will show a higher NPS score again.

For exhibitions we see a high level of user satisfaction with a NPS score of 50.8 for year one and 46 so far for year two of Europeana DSI-4. Users particularly valued to learn something new as well as the clear language and good choice of illustrations according to the text.

## 2. Introduction

Europeana Collections is Europeana's main service for end-users to access content. Europeana Collections provides access to the full Europeana dataset (ca. 57 million items) via its search functionalities (search box and filters) and curated access to high quality content via browse entry points, galleries, blogs, and exhibitions.

We have several mechanisms in place to understand who our users are (e.g. user research on user groups) and to evaluate the usage of the platform (e.g. performance indicators). We also look at direct user feedback<sup>2</sup> and undertake usability studies to find out where users are experiencing difficulties with Europeana Collections, with the aim of improving the platform over time. Chapter 5 will provide an overview over user research performed in the past months.

We measure success of Europeana Collections by looking at Key Performance Indicators (KPIs): number of visits, percentage of returning visitors, and user satisfaction. In chapter 6 we will investigate what we can learn from usage patterns and user satisfaction, with two specific objectives - we aim to:

1. increase the traffic to Europeana Collections measured in number of visits, and
2. increase the user return rate to Europeana Collections measured in the number of returning visitors as a percentage of the total over time.

## 3. Data collection methods

For the evaluation of the usage of Europeana Collections this report draws from data available via Google Analytics<sup>3</sup>. The data looked at excludes Europeana offices IP addresses based in The Netherlands (filter view) to allow for little deviations as possible (as of use by Europeana staff during maintenance and development).

User research activities may include user interviews, surveys, usability tests on low fidelity prototypes, and heatmaps to monitor interactions on Europeana Collections.

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<sup>2</sup> A detailed analysis on feedback received by users and how EF improved the platform over time will be provided in the A.1 Platform report (M20), due in April 2020.

<sup>3</sup> <https://analytics.google.com/analytics/web/>

## 4. Audiences

Europeana Collections has four main target audiences, namely teachers, researchers, cultural enthusiasts (casual users), and API users which are documented in the form of 'Personas'<sup>4</sup>. These can be found in the [Annex](#)<sup>5</sup>.

## 5. User research

In the past months, Europeana Foundation (EF) conducted user research on Europeana Collections for the new browse experience, a usability test on the new Europeana Collections website, and a survey to test the multilingual collections experience.

### User research for browse experience

Early July 2019, EF started prototyping the browse experience for Europeana Collections and we invited our end users to test it. We wanted to understand:

- How our users expect to browse?
- Which filters they use?
- How navigation labelling affects the way our users navigate the website?
- And their engagement and relationship with the website?

We asked 104 users to perform a series of tests including a first click test to test the usability of the cards, design questions to test the browse feature and navigation labelling and open ended questions to understand their level of engagement.

### Conclusion

We found that the majority of users from this test group visit Europeana Collections between once a month (34%) and once every six months (35%). These results highlight that we need to create mechanisms to draw people to visit Europeana Collections more frequently.

When asked about the purpose of their visit to Europeana Collections the majority (66%) visit to browse the collections and to discover new content. This explains why the thematic collections filter is the most popular one (56%). Users like to explore our collection by theme which presents the items in context. Therefore, EF invests in growing our current thematic collections concept of twelve thematic collections by turning this concept into thousands of smaller contextual collections around subjects, people and places using entities.

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<sup>4</sup> 'Personas' are a tool designed to help product teams to empathise with their users and consider their needs when designing the interface and developing the functionalities that determine the user experience of Europeana Collections.

<sup>5</sup> The personas were last updated in January 2019.

76% recommend Europeana Collections to their colleagues and peers which confirms that we fill a gap in the market and provide value to the users.

We also tested the positioning of the related entities to ensure that the users expectations are met when interacting with them.

### **Usability test on Europeana Collections**

In October 2019, EF conducted a usability test on the updated Europeana Collections website with five students. The purpose of this test was to check the usability of the new website in respect to:

- Navigation
- Nested search
- Search
- Tier 0 implementation
- Related collections (entities)
- Language used for search/filter

### **Conclusion**

The test results concluded that users understand the new design and can find their way around. They mentioned that it is easier to find the search bar in this design and that it's clear that when searching on a collections page you are searching within that page instead of the entire website.

The main misconception was around the related collections (entities). Users expected the related collections to act as filters and scope down the search results on the page. We think that this is due to the fact that the current implementation still lacks design and labeling. The related collections are now positioned at the same height as the title of the page and represented as pills which changes the expectations from the users. We foresee that when the design is implemented it will be clearer to the user that these are related topics.

### **Survey for multilingual experience**

Early October 2019, EF launched a survey to test our solutions for the multilingual experience on the current Europeana Collections website. Additionally, we asked questions to understand who users are and how they search. We received 393 responses.

### **Conclusion**

Based on this sample our user groups are cultural heritage professionals (27%)<sup>6</sup>, followed by students (18.1%), academics (17.3%), creative professionals (11.5%), teachers (10.4%), cultural heritage enthusiasts/casual users (09.9%), and developers (02.8%). The main

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<sup>6</sup> Cultural heritage professionals are more engaged are therefore more inclined to participate in surveys.

languages that these user groups use to search are English (33.6%), Spanish (12%), French (11.2%) and German (10.6%). Users prefer to search using several words as search terms (83.6%) instead of using sentences.

Our users are not particular about the language of their search results and are open to see search results in other languages than their search term (76.8%). The options that we offer to change the language of the interface and to filter the results by language are used sometimes to never. Based on these results we conclude that our users are educated and multilingual and are therefore not put off by the multilingual nature of our content. The language setting of their browser does in most cases reflect their preferred language so we can de-prioritise the prominence of the language selector for the interface.

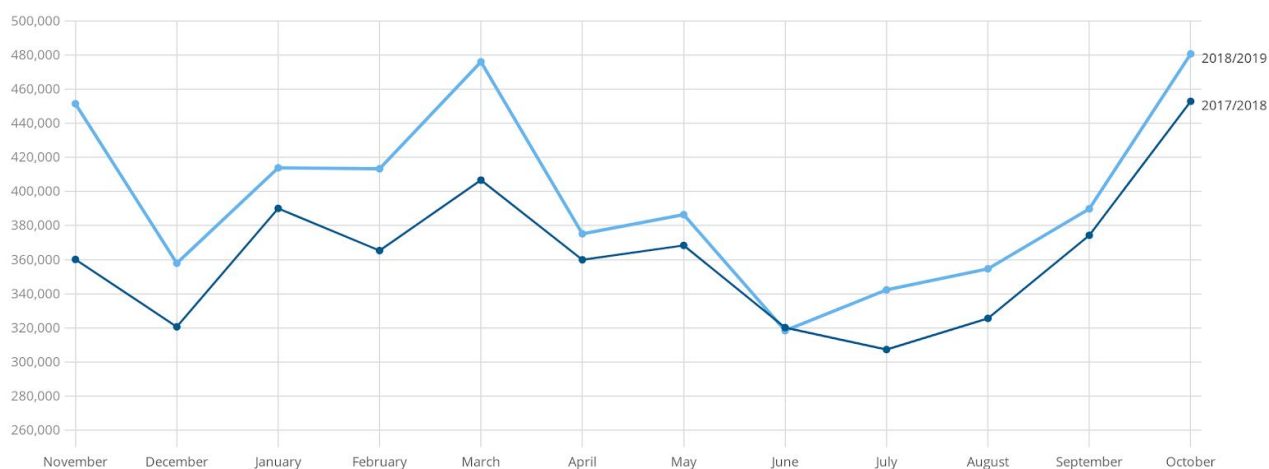
## 6. Users and usage analysis

This analysis looks at metrics related to traffic and user return rate, and evaluates user satisfaction of Europeana Collections. To get an overall impression of performance over time, this report provides a yearly comparison with the time frames November 2017 to October 2018 and November 2018 to October 2019.

### 6.1 Traffic to Europeana Collections

EF is aiming at reaching 550,000 monthly visits to Europeana Collections (including the Europeana blog and the Transcribathon website).

*Traffic to Europeana Collections, Europeana blog and the Transcribathon website comparing two reporting periods (Nov 2017 - Oct 2018 and Nov 2018 - Oct 2019)*





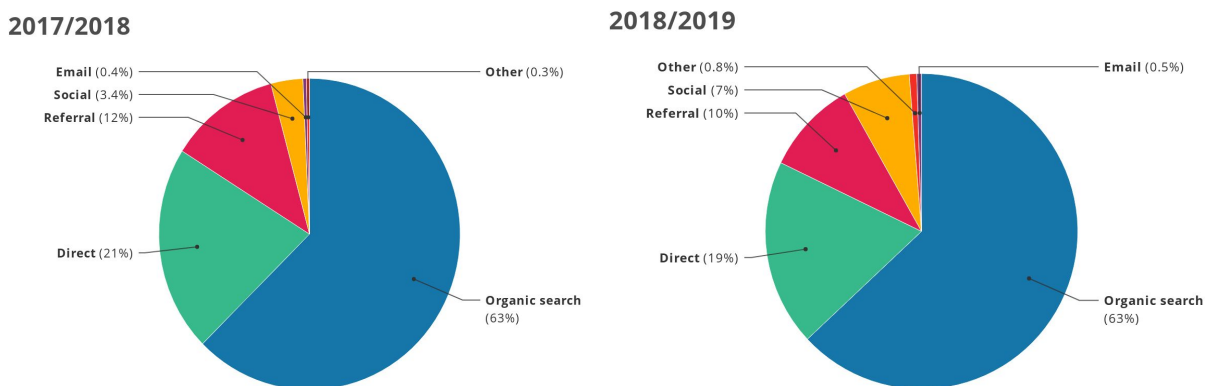
While we are not yet reaching the KPI of 550,000 monthly visits, our results improved considerably over time. Overall, we can see that the traffic increased by 9,6% from 2017/2018 (4,342,035 total traffic) to 2018/2019 (4,758,984 total traffic).

The biggest increase was observed between January and March 2019 when Europeana ran several Women’s History Month activities<sup>7</sup> and then from July onwards, when the Heritage At Risk exhibition<sup>8</sup> was published, followed by Europe At Work season<sup>9</sup> starting in September and the GIF IT UP competition<sup>10</sup> which took place in October. With 480,735 visits October 2019 was the most successful month for generating traffic to date. This suggests that seasons, exhibitions and activities engaging users with cultural heritage, have a huge potential to generate traffic.

### 6.1.1 Traffic sources

Traffic to Europeana Collections comes from five primary sources: organic search (via search engines), referral (visits coming via links on other websites), direct (people directly typing the url in the browser or using bookmarks), social (from social media platforms), and email (from newsletters).

There was an increase of traffic across all sources except of referral and direct traffic between 2017/2018 and 2018/2019.



<sup>7</sup> <https://pro.europeana.eu/page/womens-season>

<sup>8</sup> <https://www.europeana.eu/portal/en/exhibitions/heritage-at-risk>

<sup>9</sup> <https://pro.europeana.eu/page/europe-at-work>

<sup>10</sup> <https://blog.europeana.eu/tag/gif-it-up/>

*Sources of traffic to Europeana Collections, Europeana blog and the Transcribathon website comparing two reporting periods (Nov 2017 - Oct 2018 and Nov 2018 - Oct 2019)*

	<b>2017/2018</b>	<b>2018/2019</b>	<b>Change</b>
<b>Organic search</b>	2,716,531	2,999,223	+ 10,41%
<b>Direct</b>	929,106	911,048	- 1,94%
<b>Referral</b>	516,860	459,339	- 11,13%
<b>Social</b>	149,208	329,840	+ 121,06%
<b>Email</b>	14,617	23,121	+ 58,18%
<b>Other</b>	15,713	36,413	+ 131,74%
<b>TOTAL</b>	4,342,035	4,758,984	+ 9,60%

### **Organic search**

A visit is considered to come from organic search if a user arrives at our website via a search engine with keywords (unpaid search). Google Analytics automatically recognises the most popular search engines, and attributes traffic to these sources.

Organic search was the biggest source of traffic in 2018/2019 with 63%. Comparing traffic via organic search between 2017/2018 with 2018/2019 we can see an increase of 10,41%.

The landing pages through which the searchers enter the page can be a good indicator of what the searchers are interested in:

*TOP 10 landing pages accessed via organic search (Nov 2017 - Oct 2018 and Nov 2018 - Oct 2019)*

<b>TOP 10</b>	<b>2017/2018</b>	<b>Visits</b>	<b>2018/2019</b>	<b>Visits</b>
1.	/portal/en	77,942	/portal/en	62,001
2.	/portal/es	23,659	/portal/es	34,086
3.	/portal/fr	14,465	/portal/fr	16,411
4.	/portal/de	13,753	/portal/it	15,498
5.	/portal/it	12,630	/portal/de	13,654
6.	/portal/pl	9,931	/portal/pl	12,046
7.	/portal/en/exhibitions/baroque-and-enlightenment/art-and-enlighte	8,599	/portal/en/exhibitions/baroque-and-enlightenment/art-and-enlighte	7,157

	ument		ument	
8.	/portal/es/record/2023705/36A59AE04DD2ABA96C3198CEFD11100D74BF0279.html	5,372	/portal/es/exhibitions/art-nouveau-a-universal-style/origins-of-art-nouveau	6,136
9.	/portal/nl	5,305	/portal/en/exhibitions/art-nouveau-a-universal-style/origins-of-art-nouveau	5,395
10.	/portal/es/exhibitions/european-sport-heritage/deportes-europeos	4,358	/portal/es/exhibitions/european-sport-heritage/deportes-europeos	5,585

Both in 2017/2018 and 2018/2019 the majority of top 10 landing pages via organic search were the different language version of the Europeana Collections homepage. This suggests that the used keyword via search engines was 'europeana'. Interestingly, the amount of the visitors of the English version of the website dropped by over 15,000, while the number of visitors of the Spanish, French, German, Italian and Polish versions increased. The other top results lead to the chapters of older exhibitions. The exhibition that generated most traffic 'Baroque and Enlightenment' received most traffic via organic search. This confirms the Search Engine Optimization (SEO) potential of the curated content, especially of exhibitions. As for every piece of curated content created, we do a keyword research and optimise titles, we expect that more content will achieve a more prominent position in Google search results over time. It's also worth mentioning that the increased interest in the European sports and sport heritage has an opportunity to be addressed through a sports season potentially planned for the next year.

In this period users landed on 185,573 different pages, as a result of multiple niche searches. This is a sign of a long tail-traffic on which we have a limited influence. The diversity of interest of our users makes it difficult for us to see clear trends.

**Direct traffic**

A visit is considered to be direct traffic if a user directly typed an Europeana Collections related URL, or if the user had bookmarked the site. Direct traffic was the second largest traffic source in 2018/2019 with 19%. We observed a slight decrease in direct traffic (1,94%) which translates into 18,058 visits.

**Referral traffic**

A visit is considered a referral when a user is referred from another site to Europeana Collections. Referral traffic made up 10% of the total traffic in 2018/2019. Comparing 2017/2018 with 2018/2019 we can see a decrease of 11,3%.

The biggest impact on the referral traffic in 2019 was the removal of Europeana Collections from the Creative Commons Search engine due to right statements accuracy issues (24,157

visits in 2017/2018 versus 4,384 in 2018 - over 80% drop). We are working on connecting Europeana data back into Creative Commons Search. We have supplied preliminary data to Creative Commons for inclusion and we are waiting for their implementation, scheduled for between Q4 2019 and Q1 2020.

*TOP traffic sources via referral traffic (Nov 2017 - Oct 2018 and Nov 2018 - Oct 2019)*

Source	2017/2018	2018/2019	Change
omnia.ie	6,320	17,662	+179,46
noticias.universia.es	26,901	16,150	-39,97%
bibliotecaspublicas.es	18,938	12,321	-34,94%
en.wikipedia.org	4,472	4,864	+8,77%
pix-geeks.com	4,494	4,575	+1,8%
search.creativecommons.org	24,157	4,384	-81,85%
bdh.bne.es	5,209	4,098	-21.33%
conted.ox.ac.uk	0	3,845	new
ebscohost.com	3,939	3,739	-5.08%
ceres.mcu.es	1,893	3,542	+87.11%

Omnia.ie<sup>11</sup> is the source that generated most referral traffic to Europeana Collections in 2018/2019. The platform allows a user to explore repositories such as Europeana or the Digital Public Library of America through one interface<sup>12</sup>. This can be seen as a success story of integrating the Europeana API in external services.

The second largest traffic source was Universia<sup>13</sup> a portal of Spanish and Latin American universities while 'noticias' is their news section. Another success story of referral traffic is the Bibliotecas Públicas in Spain which integrated a search bar for Europeana content on their homepage. This suggests the interest of Spanish libraries and universities in Europeana services.

### **Social<sup>14</sup>**

Traffic from social media makes up 7% of the total traffic. The traffic more than doubled between 2017/2018 and 2018/2019 (105,42%), as a result of adjusting the editorial strategy and replacing year-long thematic campaigns by seasons. With the seasons, being closer

<sup>11</sup> <http://omnia.ie/>

<sup>12</sup> <https://eadh.org/projects/omnia>

<sup>13</sup> <https://www.universia.es/>

<sup>14</sup> Traffic from social media such as Facebook.

related to the website and offering interesting curated and editorial content, we are able to use social media not only to showcase Europeana's content and encourage engagement on the platforms used by culture enthusiasts, but we can also use these platforms to generate traffic to Europeana Collections. While at the moment social media generates around 7% of traffic, the potential is high and we expect an increase, especially during the seasons.

*Visits to Europeana Collections from top 5 social networks (Nov 2017 - Oct 2018 and Nov 2018 - Oct 2019)*

Social network	2017/2018	2018/2019	Change
Facebook <sup>15</sup>	66,096	143,783	+117.54%
Pinterest <sup>16</sup>	38,223	56,704	+48,35
Twitter <sup>17</sup>	16,866	15,968	-5,32%
Instagram <sup>18</sup> /Instagram Stories	0	2,208	NEW
YouTube <sup>19</sup>	716	1,163	+62.43%

The most social traffic comes from Facebook thanks to easiness of linking, various image options and easiness of providing content as well as advanced targeting and promotional options. On Facebook we can observe a decline of younger users and we started to develop our Instagram presence to reach them, aiming for both channels to grow further.

Pinterest attracts mostly users interested in the visual aspect of the record and it's expected to grow with the increased amount of high quality content with thumbnails on Europeana Collections.

In 2018 Twitter changed its purpose from social network to 'news and social networking service'. Since then, the conversations on the platform perform better than linking to external sources which contributes to 5,32% drop. Yet, we are planning to further develop our presence on Twitter to interact with audiences, especially the partner institutions, network members and various EU accounts.

The Europeana challenge 2019<sup>20</sup> inviting educators to create a video using Europeana material contributed to the increase of traffic coming from YouTube, from the winning videos<sup>21</sup>.

<sup>15</sup> <https://www.facebook.com/Europeana/>

<sup>16</sup> <https://www.pinterest.de/europeana/>

<sup>17</sup> <https://twitter.com/Europeanaeu>

<sup>18</sup> [https://www.instagram.com/europeana\\_eu/](https://www.instagram.com/europeana_eu/)

<sup>19</sup> [https://www.youtube.com/channel/UC\\_Z8vHTU2qx4\\_qBly9f\\_u0A](https://www.youtube.com/channel/UC_Z8vHTU2qx4_qBly9f_u0A)

<sup>20</sup> <https://pro.europeana.eu/post/europeana-stem-challenge>

<sup>21</sup> <https://www.youtube.com/watch?v=GMgP-4O99qU&t=3s;>  
<https://www.youtube.com/watch?v=xnClSss50pl&t=136s>

Besides our own social media channels we started to receive traffic from VKontakte, a social media platform popular mainly in Russia, Belarus and Ukraine as well as traffic from Asian social networks such as Sina Weibo and Naver. This shows that Europeana Collections increases to be recognised outside of the European Union.

Most interaction with Europeana content is still taking place on the social platforms themselves. More information on social media engagement can be found in C.3 Content supply and reuse reports<sup>22</sup>.

### Email

Email traffic makes up 0.5% of total traffic. Email traffic increased between 2017/2018 and 2018/2019 with 58,18%. While making our mailing list GDPR<sup>23</sup> compliant, we improved the UTM tracking<sup>24</sup> by introducing custom parameters, replacing the automatic tracking (unreliable due to multiple email providers, apps and devices used) by custom UTM values. This made our email traffic better trackable which contributes to the growth.

### 6.1.2 Geographic distribution of users

To gain a better understanding of traffic to Europeana Collections we also looked at the geographic distribution of users. The table below illustrates the top 10 countries from which users visited Europeana Collections.

*Top 10 countries with most visits (Nov 2017 - Oct 2018 and Nov 2018 - Oct 2019)*

Top 10	2017/2018	2018/2019
1.	The Netherlands (457,923 visits=11.37%)	The Netherlands (444,459 visits=10.22%)
2.	Spain (373,820=9.28%)	Spain (390,215=8,97%)
3.	Germany (327,157=8,12%)	Germany (369,547=8,5%)
4.	United States (363,962=9,04%)	United States (354,642=8,15%)
5.	Italy (240,538=5,97%)	Italy (244,134=5,61%)
6.	France (185,355=4,6%)	France (182,944=4,21%)
7.	Poland (185,347=4,6%)	Poland (166,610=3,83%)
8.	United Kingdom (167,734=4,16%)	United Kingdom (163,790=3,77%)

<sup>22</sup> C.3 Content supply and reuse report (M10) can be accessed on the Europeana DSI-4 project page in the document section. <https://pro.europeana.eu/project/europeana-dsi-4>.

<sup>23</sup> General Data Protection Regulation (GDPR).

<sup>24</sup> Urchin Tracking Module (UTM) variants of URL parameters used to track the effectiveness of online marketing campaigns.

9.	Sweden (123,346=3,06%)	Sweden (145,917=3,35%)
10.	Denmark (97,680=2,43%)	Denmark (112,285=2,58%)

Both in 2017/2018 and 2018/2019 the top 10 list consisted of nine EU Member States and the United States. It's worth noting that with the exception of Norway and Austria, the top 10 countries generating visits are the same ones that provide the most content to Europeana:

*Countries with highest amount of items on Europeana Collections (Nov 2019)*

<b>Country</b>	<b>Number of items</b>
Netherlands	9,800,739
Germany	5,724,271
France	5,017,139
Spain	4,999,384
United Kingdom	4,908,331
Norway	4,861,318
Sweden	3,862,420
Poland	3,062,983
Italy	3,002,198
Austria	2,235,648
Denmark	1,668,733
Belgium	1,490,167

### 6.1.3 Benchmarking: traffic

The short benchmarking analysis is done to get a better understanding of how successful Europeana Collections is compared to other/similar online cultural information services looking at traffic. We used the service SimilarWeb.com<sup>25</sup> for the analysis.<sup>26</sup> The analysis includes cultural information services that were part of a previous benchmarking study<sup>27</sup> for Europeana in 2017.

#### *Global cultural information services*

Institution	Description <sup>28</sup>	Size of online collection <sup>29</sup>	Traffic October 2019 <sup>30</sup>
Library of Congress <sup>31</sup> (LOC)	the library of congress is the nation's oldest federal cultural institution, and it serves as the research arm of congress. it is also the largest library in the world, with more than 162 million items. the collections include books, sound recordings, motion pictures, photographs, maps, and manuscripts.	Approx. 20 million items	6,150,000
Smithsonian <sup>32</sup>	official website of the smithsonian, the world's largest museum and research complex, with 19 museums, 9 research centers, and affiliates around the world.	Approx. 3.9 million items	4,350,000
Google Arts & Culture <sup>33</sup>	google arts & culture features content from over 1200 leading museums and archives who have partnered with the google cultural institute to bring the world's treasures online.	Approx. 6 million	4,250,000
Trove (National Library of Australia) <sup>34</sup>	trove: find and get australian resources. books, images, historic newspapers, maps, archives and more.	Approx. 235 million items	1,950,000
Gallica <sup>35</sup>	several million free searchable and downloadable documents: books, manuscripts, maps and plans,	Approx. 5 million	1,700,000

<sup>25</sup> SimilarWeb is a digital market intelligence platform that provides website traffic statistics & analytics.

<sup>26</sup> Information retrieved in November 2019.

<sup>27</sup> <https://pro.europeana.eu/project/benchmarking-europeana>

<sup>28</sup> Description is taken from SimilarWeb.com or institutions websites.

<sup>29</sup> The figures are rough estimates based on information available on institutions websites or other sources. Actual numbers might differ.

<sup>30</sup> Metrics taken from similarweb.com (except figures for Europeana Collections).

<sup>31</sup> Institution homepage: <https://www.loc.gov/>; SimilarWeb <https://www.similarweb.com/website/loc.gov>

<sup>32</sup> Institution homepage: <https://www.si.edu/>; SimilarWeb: <https://www.similarweb.com/website/si.edu>

<sup>33</sup> Institution homepage: <https://artsandculture.google.com/>; SimilarWeb: <https://www.similarweb.com/website/artsandculture.google.com>

<sup>34</sup> Institution homepage: <https://trove.nla.gov.au/>; SimilarWeb: <https://www.similarweb.com/website/trove.nla.gov.au>

<sup>35</sup> Institution homepage: <https://gallica.bnf.fr/>; SimilarWeb: <https://www.similarweb.com/website/gallica.bnf.fr>



	prints, photographs, posters, journals, press and newspaper publications, sound recordings, sheet music	items	
HathiTrust <sup>36</sup>	HathiTrust is a partnership of academic & research institutions, offering a collection of millions of titles digitized from libraries around the world	Approx. 9 million items	1,200,000
World Digital Library (WDL) <sup>37</sup>	the world digital library provides free access to manuscripts, rare books, maps, photographs, and other important cultural documents from all countries and cultures, in arabic, chinese, english, french, portuguese, russian and spanish	Approx. 19.1 thousand items	880,000
Europeana	artworks, artefacts, books, films and music from european museums, galleries, libraries and archives	Approx. 57.7 million items	480,000
ArtUK <sup>38</sup>	discover artworks, explore venues and meet artists. art uk is the online home for every public collection in the uk. featuring over 200,000 oil paintings by some 38,000 artists	Approx. 236 thousand items	230,000
Digital Public Library of America <sup>39</sup> (DPLA)	the digital public library of america brings together the riches of america's libraries, archives, and museums, and makes them freely available to the world.	Approx. 35.4 million items	150,000
Artstor <sup>40</sup>	bring together media from the world's museums, archives, scholars, and artists, with a specialized suite of tools for teaching and learning with visual materials — all rights-cleared for education and research.	Approx. 2.5 million items	120,000

The metrics shown in the table reveal that the size of the online collection does not necessarily correspond to the amount of traffic. The World Digital Library (WDL), for example, has 19.1 thousand items and almost twice as much traffic as Europeana Collections with about 57 million items. This suggests that not the quantity of collections but rather the quality of collections provided has the potential to generate traffic to a website.

<sup>36</sup> Institution homepage: <https://www.hathitrust.org/>; SimilarWeb:

<https://www.similarweb.com/website/hathitrust.org>

<sup>37</sup> Institution homepage: <https://www.wdl.org/en/>; SimilarWeb: <https://www.similarweb.com/website/wdl.org>

<sup>38</sup> Institution homepage: <https://artuk.org/>; SimilarWeb: <https://www.similarweb.com/website/artuk.org>

<sup>39</sup> Institution homepage: <https://dp.la/>; SimilarWeb: <https://www.similarweb.com/website/dp.la>

<sup>40</sup> Institution homepage: <https://www.artstor.org/>; SimilarWeb: <https://www.similarweb.com/website/artstor.org>

According to the information provided by SimilarWeb<sup>41</sup>, the majority of listed institutions are based in the United States with the vast majority of traffic coming from the United States as well. The other top visitors' countries to American services are Canada and the UK, followed by India and Australia. Gallica, ArtUK and Trove receive the visits mainly from their respective countries. This indicates that the services mainly serve their country of origin or countries with the same language coverage.

Europeana Collections, on the other hand serves all EU member states. This can also be seen in the language coverage with nine EU countries in the top ten. Only two countries of top ten are English speaking (USA - 4th position and UK - 8th position). This confirms Europeana Collections unique position as a pan-European source of cultural heritage material. Yet, offering a service in all EU languages is much more complicated and requires significantly more resources (e.g. to target audiences or to provide user experiences in several languages).

## 6.2 User return rate to Europeana Collections

EF is aiming at reaching a user return of 30% on Europeana Collections. Currently, we have a user return rate of about 13%. Users return to a website when they see value in the product for solving a need that they have and are incentivised to return by promotional activities and dynamic content. Our aim is to see a steadily growing user return rate from year to year showing that Europeana Collections is valued by our users and those are drawn back to the website more frequently.

*User return rate to Europeana Collections comparing (Nov 2017 - Oct 2018 and Nov 2018 - Oct 2019)*

	2017/2018	2018/2019	Change
New users	3,086,069 (89.2%)	3,348,715 (89%)	-0.2%
Returning users	371,741 (10.8%)	413,141 (11%)	+0.2%

Comparing 2017/2018 with 2018/2019 we gained 41,400 returning users and 262,646 new users. We are gaining more traffic but unfortunately new users very slowly convert into returning users.

Over the course of this year limited work was done on the current portal. With the launch of the updated portal coming soon, we expect the user return rate to go up in 2020. The updated portal will provide an enhanced browsing experience based on collections (entities) which will improve the user experience and discovery of content on Europeana Collections.

<sup>41</sup> Only top five countries are available.

## User retention

User retention measures the frequency by which users return to the website. In this case we are looking at the user retention for all our users (new and returning). The following metrics compare user retention metrics as stated in the previous C.2 deliverable (March - May 2019) with current metrics (August - October 2019).

### *User retention on Europeana Collections between August and October 2019*

	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
<b>All Users</b> 845,282 users	100.00%	2.57%	1.14%	0.45%			
Aug 1, 2019 - Aug 31, 2019 252,185 users	100.00%	2.37%	1.12%	0.45%			
Sep 1, 2019 - Sep 30, 2019 280,367 users	100.00%	2.64%	1.16%				
Oct 1, 2019 - Oct 31, 2019 312,730 users	100.00%	2.68%					

### *User retention on Europeana Collections between March and May 2019*

	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
<b>All Users</b> 875,238 users	100.00%	2.04%	0.84%	0.18%			
Mar 1, 2019 - Mar 31, 2019 328,889 users	100.00%	2.43%	1.27%	0.18%			
Apr 1, 2019 - Apr 30, 2019 271,954 users	100.00%	2.63%	0.32%				
May 1, 2019 - May 31, 2019 274,395 users	100.00%	1.00%					

Comparing the two periods we see that user retention has increased. The number of users who returned in the first month slightly increased with 0.53% compared to the previous period. There is a similar increase in the second and third month. Even though this is not a significant increase it shows that the returning users we have are loyal and continue to come back to Europeana Collections regularly.

## 6.3 User satisfaction

EF regularly measure user satisfaction on Europeana Collections through surveys. Three times a year, we make two surveys - one measuring Net Promoter Score and one measuring user satisfaction using a Likert Scale. For thematic collections, we monitor user comments about irrelevant material and regularly refine the queries on which these are based.

### *User satisfaction for Europeana Collections (Europeana DSI-4)<sup>42</sup>*

<b>Metric</b>	<b>Sep 18 - Aug 19 (Year 1)</b>	<b>Aug 19 -</b>
NPS survey (average)	38	17
Likert scale survey % users rating % or higher	83%	87%

In year one of Europeana DSI-4 we exceeded our target of 30 for the NPS survey. Europeana Collections achieved a very good NPS score, with an average of 38<sup>43</sup>. We also received very good feedback from the Likert scale survey. On average, 83% of the Europeana Collections users surveyed, rated their level of satisfaction as satisfied, very satisfied or totally satisfied with the website.

The last measurement done for the NPS score in November 2019 was lower than usual with an NPS of 17. The NPS score is still positive while every score above 0 can be considered good. The Likert scale survey showed very good results with increased satisfaction compared to year one of Europeana DSI-4.

### *User feedback we received for Europeana Collections*

<b>Users like</b>	<b>Users do not like</b>
<ul style="list-style-type: none"> <li>- First of all the fact that the work is digitised</li> <li>- Full of interesting stuff and it's really useful for academic purposes</li> <li>- It brings together material from various digital collections</li> <li>- Variety, rich collection accessibility and breadth of subjects</li> <li>- La accesibilidad y la buena organización de los</li> </ul>	<ul style="list-style-type: none"> <li>- Make it more easy to see images in full screen</li> <li>- Make search engine much better / specific to my search</li> <li>- Please, do more comfortable search. It is difficult to find a particular image. I have to look all of thousands. Thanks!</li> <li>- La consultation par mots clés n'est pas satisfaisante</li> </ul>

<sup>42</sup> Metrics are average figures.

<sup>43</sup> An NPS is calculated based on responses to a single question: 'How likely is it that you would recommend our company/product/service to a friend or colleague?' NPS rating is on a scale of -100 to +100, with a score of +50 considered excellent. [https://en.wikipedia.org/wiki/Net\\_Promoter](https://en.wikipedia.org/wiki/Net_Promoter)

contenidos - Good, large images, high resolution pictures - It is a huge research tool	- Please make sure the links work - Add an option of date filter / order results by date - More search delimiters
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For each new exhibition, a Net Promoter survey is undertaken. These run for the duration of the exhibition promotion, until 100 responses are reached or one month (whichever milestone is reached first).

#### *User satisfaction for exhibitions (Europeana DSI-4)<sup>44</sup>*

Metric	Sep 18 - Aug 19 (Year 1)	Sep 19 -
NPS survey (average)	50.8	46

In year one of Europeana DSI-4 we exceeded our target of 30 for the NPS survey for exhibitions. Exhibitions achieved a very good NPS score, with an average of 50.8. For the second year so far we also reached a very good score of 46.

#### *Examples of comments on the exhibitions*

Exhibition	Comment
Rise of Literacy in Europe <sup>45</sup>	<i>Beautiful. Interesting. Teaches things in a light, factual and concise way</i> (Visitor from Portugal)  <i>The clear language use and the links to the illustrations. Great job!</i> (Visitor from France)
Heritage at Risk <sup>46</sup>	<i>I work in a heritage sector, and this exhibition will interest our museum's coordinator, and the curators of our museums.</i> (Visitor from Canada)  <i>I learned about the things that were new to me. It was interesting.</i> (Visitor from Estonia)
Pioneers <sup>47</sup>	<i>I think it is important to show that in the past there were women who did amazing things. People still think women never did anything important because they were not capable, didn't have brains or artisticity or anything. Which is not true of course.</i> (Visitor from the Netherlands)

<sup>44</sup> Metrics are average figures.

<sup>45</sup> <https://www.europeana.eu/portal/en/exhibitions/rise-of-literacy-in-europe>

<sup>46</sup> <https://www.europeana.eu/portal/en/exhibitions/heritage-at-risk>

<sup>47</sup> <https://www.europeana.eu/portal/en/exhibitions/pioneers>

	<p><i>[I liked the most] esthetic ergonomy for mobile screen, good choice of illustrations according to the text, fluidity of reading and looking...</i> (Visitor from France)</p> <p><i>Not only does it cover the works of little known and unsung women of painting when women weren't usually seen as creators of art, but they were all highly skilled as evidenced by the quality of their artwork. This exhibition is no small thing.</i> (Visitor from United States)</p>
An Eye for Detail <sup>48</sup>	<p><i>Very pleasant to look and and the text make a visit worthwhile!</i> (Visitor from Netherlands)</p> <p><i>[I liked the most] the selection of the images and the idea of the content.</i> (Visitor from Spain)</p>
People on the Move <sup>49</sup>	<p><i>Extremely well curated, very nice pictures and stories! Compelling read!</i> (Visitor from Belgium)</p> <p><i>The variety of aspects related to migration and the different places of origin and arrival of migrants</i> (Visitor from Italy)</p>

We monitor other feedback on our other editorial formats (blogs and galleries) through direct commenting on the feature (e.g. blogs) and through social media responses. This feedback is mostly positive and/or qualitative. 186 comments were added on blogs in year one of Europeana DSI-4. A lot of the user feedback we receive for our editorials does not equate to actionable changes that need to be made, rather it demonstrates that users are engaging with and reacting to the content<sup>50</sup>.

#### Examples of comments on the blog

<b>Blog</b>	<b>Comment</b>
Adriatic relationships: Carlo Goldoni's La Dalmatina <sup>51</sup>	<i>Enjoyable article and great Canaletto print, too!</i>
Krzysztof Kieślowski: migratory filmmaker <sup>52</sup>	<i>I was very young when I first saw them in a cinema theatre...I will never forget the impact on me... Congrats for the project!</i>

<sup>48</sup> <https://www.europeana.eu/portal/en/exhibitions/an-eye-for-detail>

<sup>49</sup> <https://www.europeana.eu/portal/en/exhibitions/people-on-the-move/>

<sup>50</sup> Detailed information on actions taken to improve the platform based on user feedback received will be reported on in the A.1 Platform report, due April 2020.

<sup>51</sup> <https://blog.europeana.eu/2019/07/adriatic-relationships-carlo-goldonis-la-dalmatina/>

<sup>52</sup> <https://blog.europeana.eu/2019/06/krzysztof-kieslowski-migratory-filmmaker/>

<p>Liberation skirts: how post-war upcycling became a symbol of female solidarity<sup>53</sup></p>	<p><i>Thank you for this shared true emotional “Liberation skirt”. Young women almost forgotten to choose sewing or this part of garment It will touch all women who used to “have all day want” and “waste their time on original handcrafts made products”. Re using is a good solution and also self made products always have more spirit and makes a joy at least for their creators.</i></p>
<p>Legends of La Liga: Ferenc ‘Pancho’ Puskás and Hungarian footballers in El Clásico<sup>54</sup></p>	<p><i>This story builds bridges, creates links, goes beyond boundaries. This is what Europa means.</i></p>
<p>What is the real palaeo diet, and who invented bread? Archaeological findings on eating and drinking in the past<sup>55</sup></p>	<p><i>Really interesting article, thank you for sharing it with all of us!</i></p>
<p>Marco Polo – the man who brought China to Europe<sup>56</sup></p>	<p><i>You really helped me with a research project</i></p>

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<https://blog.europeana.eu/2019/05/liberation-skirts-how-post-war-upcycling-became-a-symbol-of-female-solidarity/>

54

<https://blog.europeana.eu/2019/04/legends-of-la-liga-ferenc-pancho-puskas-and-hungarian-footballers-in-el-clasico/>

<sup>55</sup> <https://blog.europeana.eu/2019/02/what-is-the-real-palaeo-diet-and-who-invented-bread/>

<sup>56</sup> <https://blog.europeana.eu/2014/01/marco-polo-the-man-who-brought-china-to-europe/>

## 7. Conclusion

### Traffic

While we are not yet reaching the traffic KPI of 550,000 monthly visits, our results improved considerably with 9,6% increased traffic comparing 2017/2018 and 2018/2019. The biggest increase was observed related to the publication and promotion of seasons, exhibitions and activities engaging users with cultural heritage. With 480,735 visits October 2019 was the most successful month for generating traffic to date.

Organic search continues to be the biggest source of traffic with 63% (out of total). 98% of this traffic arrived via Google and 73% of this traffic on item pages. In our efforts to make Europeana Collections more discoverable by Google we will publish schema.org<sup>57</sup> for item pages which in theory will make the content more valuable for search engines. This work is planned to be implemented after the launch of the updated portal after February 2020.

Top landing pages were different language version of the Europeana Collections homepage. This indicates that the used keyword via search engines was 'europeana'. This suggests that our various communication and dissemination activities for Europeana Collections but also all other activities undertaken within the Europeana network and ecosystem raised awareness and interest in Europeana services. We also saw the potential of curated content, in particular exhibitions to generate traffic via organic search. This confirms the Search Engine Optimization (SEO) potential of the curated content and we expect that more content will achieve a more prominent position in Google search results over time.

Looking at referral traffic we could see that API integrations have the potential to generate traffic to Europeana Collections. EF will investigate possible API strategies after February 2020.

Traffic coming from social media more than doubled between 2017/2018 and 2018/2019 as a result of adjusting the editorial strategy to seasons offering interesting curated and editorial content. While at the moment social media generates around 7% of traffic, the potential is high and we expect an increase, especially during the seasons.

Both in 2017/2018 and 2018/2019 the top 10 countries with most visits were nine EU Member States and the United States. It's worth noting that most of the top 10 countries generating visits are the same ones that provide the most content to Europeana Collections. Users might be most interested in national data collections or arrived to an item page with a keyword unique to their language.

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<sup>57</sup> 'Schema.org: Webmasters use this shared vocabulary to structure metadata on their websites and to help search engines understand the published content, a technique known as search engine optimization.' Source: <https://en.wikipedia.org/wiki/Schema.org>



A short benchmarking analysis comparing Europeana Collections to other/similar online cultural information services showed that the size of online collection does not necessarily correspond to the amount of traffic the service received. The majority of services analysed served mainly their country of origin or countries with the same language coverage. Europeana Collections, on the other hand serves all EU member states and has a broad coverage of visitors' countries. This confirms Europeana Collections unique position as a pan-European source of cultural heritage material. Yet, offering a service in all EU languages is much more complicated and requires significantly more resources (e.g. to target audiences or to provide user experiences in several languages).

### **User return**

Comparing 2017/2018 with 2018/2019 we gained returning users and new users. We are gaining more traffic but unfortunately new users very slowly convert into returning users. The analysis also showed that user retention slightly increased with 0.53% compared to the previous period. Even though this is not a significant increase it shows that the returning users we have are loyal and continue to come back to Europeana Collections regularly. With the launch of the updated portal coming soon, we expect the user return rate to go up in 2020.


### **User satisfaction**

In year one of Europeana DSI-4 we exceeded our target of 30 for the NPS survey on Europeana Collections. Europeana Collections achieved a very good NPS score, with an average of 38. The last measurement done in November 2019 was lower than usual with an NPS of 17. In the past months, we emphasised work on the updated portal with little updates to the current portal. The updated portal will be released in February 2020. We expect that the next NPS to be measured in March 2020 will show a higher NPS score.

Individual user feedback received (surveys and feedback on the editorials) showed that users value the breath of digital collections on Europeana Collections. Users also mentioned high satisfaction with high quality content. On the other hand, users had difficulties to find content they like on Europeana Collections and suggested improved search and filter options. EF continues to work on search improvements on Europeana Collections. One main outcome planned for 2020 are updates to search and indexing processes to improve the efficiency and effectiveness of search results. The updated portal will also include improved filter options for users to narrow down their search results. Improvements were done based on user research and additional filters were added based on entities.

For exhibitions we see a high level of user satisfaction with a NPS score of 50.8 for year one and 46 so far for year two of Europeana DSI-4. User particularly valued to learn something new as well as the clear language and good choice of illustrations according to the text.

# Annex: Europeana Personas



Jenny 46 yrs

Teacher

### Goals

What changes do we want to help the user make?

My goal is to motivate my young students to learn by creating connections with real life

### Tasks

What tasks are carried out by the user?

- I use the search feature over thematic collections
- I use similar items feature to find other items
- I make sure the items I use are free to re-use
- I read the description of the items

### The teacher

### About Jenny

What does the user believe in?

- I am a secondary school teacher of physics, chemistry, mathematics
- I am very passionate about teaching my student
- I make sure my lessons are fun and interesting for the students
- I believe students are the future

### Frustrations


Whats keeping the user from achieving their goal?

- I don't know if it's me who can't find it or if it doesn't exist
- I copy paste the URL in a word document to find it later
- I find the inconsistent structure of metadata to be troublesome
- I find unclear information on licensing to hinder my activity

### Context of use

What does the user need from us?

- I require high resolution public domain content
- I need to have Science Thematic Collection
- I need to know the information on the rights of use
- I have found out about Europeana through social media posts



Lisa 37 yrs

Post doctorate

### Goals

What changes do we want to help the user make?

Become a published author by finding and reusing specific items for my research

### Tasks

What tasks are carried out by the user?

- I use the search feature over thematic collections
- I download and zoom in to images
- I use filters to refine my search
- I read the metadata and use images
- I use art, maps, manuscripts collections

### The Researcher

### About Lisa

What does the user believe in?

- I am writing a research paper on the specific topic she is passionate about. With a lot of care, she chooses the content for her research paper.
- In my free times she enjoys reading antique books online
- Sometimes I feel researching alone is a lonely job.

### Frustrations

Whats keeping the user from achieving their goal?

- I am skeptical about the availability of the metadata
- I get inaccurate search results due to not having appropriate filters like date range
- I come across broken links so can't decide the information to be accurate and up to date
- The quality of metadata needs to be better

### Context of Use

What does the user need from us?

- I need to be able to cite the records correctly
- More access to items licensed for reuse
- I need to know the provider, creator of the item
- I found out about Europeana from friends or colleagues
- I visit Europeana once/month



The Culture enthusiasts

Sam 32 yrs

Blogger

### Goals

What changes do we want to help the user make?

To gain a wider perspective on the cultural heritage of Europe

### Tasks

What tasks are carried out by the user?

- I use the grid and list view
- I copy the link to paste on social media such as Twitter
- I watch videos and search for items based on location
- I visit art, photography, music

### About Adam

What does the user believe in?

- I look into Europeana to find an inspiration for my work
- I like to gain followers by sharing Europeana content on social media
- I want to gain a deeper understanding of European cultural heritage

### Frustrations

Whats keeping the user from achieving their goal?

- I feel neutral about the trustworthiness of items
- To clear filters, I have to go back a page to start a search
- The search results are either too long or too little

### Context of use

What does the user need from us?

- I require openly licensed items for reuse
- I search for specific contents
- I found out about Europeana via social media posts
- I visit Europeana once/month



The API users

Sam 35 yrs

Developer

### Goals

What changes do we want to help the user make?

Become a creator of a meaningful app by using the records and APIs.

### Tasks

What tasks are carried out by the user?

- Read the documentation
- Compare the results against collections
- Find ways to get help from the forum, customer support
- Use the console, examples, and requesting API key

### About Sam

What does the user believe in?

- I like the challenge of creating something new. I work on my project side by side my full-time job
- I heavily depend on the documentation to guide me
- My API calls Europeana several times a day
- I use the Search and Record API

### Frustrations

Whats keeping the user from achieving their goal?

- I feel the documentation is unclear and less detail-oriented
- I feel not having enough examples in the documentation makes things difficult
- I find continuously scrolling the long documentation tiresome
- No range search (eg 1800-1850) is possible for the historical time

### Context of use

What does the user need from us?

- A simplified version of API would be useful, as the metadata are rather lengthy
- Avoid redundant depth of API (e.g. many arrays have only one data in [0])
- Order data in terms of guide, title, date to be understandable