



# Website Reach & Performance Evaluation Report

INFO-685

Digital Analytics

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Link to Dashboard:  
[https://datastudio.google.com/s/mlcZX  
X2u9dg](https://datastudio.google.com/s/mlcZX<br/>X2u9dg)

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## Executive Summary

The Museu Nacional d'Art de Catalunya finds itself in the same position as many other museums in the year 2020, doing its best to maintain accessibility on a global scale while ensuring the safety of their local stakeholders and staff amidst the COVID pandemic. Furthermore, the institution is currently seeking to improve their web presence and increase available information about its collection to online visitors as part of a redesign of the existing site. (<https://www.museunacional.cat/en>)

In response to these goals, a close examination of the website and its users was performed, focusing on several key factors such as location, interaction, site performance, and general layout. Through careful analysis of these metrics, and others, a multi-page Dashboard was created to best represent critical user data, along with a preliminary strategy to guide the upcoming site redesign.

Overall, the findings from these analyses suggest that the Museu Nacional d'Art de Catalunya can better serve its digital audience through A) A more intuitive website layout, with particular emphasis on increased scrolling and less clicking to ease navigation B) Better language support for European and Asian users, particularly those in close geographic proximity, ie Portuguese, French, German and Italian C) Enhancing overall information and details about individual pieces of the collection being displayed online.

## Introduction

The Museu Nacional d'Art de Catalunya has functioned for many years with a large and complex website featuring information regarding the museum, how to plan a visit, the collection, the exhibitions, learning resources, and the museums social media. This information is filtered into seven tabs on the website and translated into three languages: Català, Español, and English. They offer a simple landing page with ticket information, opening hours, and group information in German, Italiano, Français, Português, Pycckñ, 日本語, and 繁體中文. Though the museum has relied on this version of the website for many years, there is an increased need for a simplified version that can be translated into many languages.



Figure 1 The Landing Page of the Website with the Language Menu

In December of 2020, the museum plans to undergo a complete redesign of the website. Using data collected through Google Analytics, a dashboard will be created to inspire the new design, keeping the audience as the top priority. The audience of the website includes local visitors, international visitors,

researchers, and educators. The dashboard will focus greatly on creating a profile of this audience and how they use the website. It will collect data on who the audience is, where they are coming from and where they are going, how they are moving through the website, ticket sales, and the overall function of the website.

With this Google Dashboard, the museum website will be able to function best for its audience. With careful attention to the audience profile, website function, and user location; the museum will create a simplified and intuitive website.

## Methodology

### *Interview*

Before starting the evaluation, we met with Ana Ponce, the Museum's Webmaster and Social Media & Community Manager. We asked about the current issues toward their social media and website to better understand the website's circumstances and create a scope for our evaluation. The interview questions are outlined below:

1. What are your goals for social media? Do you want more impressions, more engagement, website clicks, etc?
2. What are your goals for the website? Do you want to see an increase in email subscriptions, time spent on the page, bounce rate, pages visited, etc?
3. How much English language engagement would you like to pursue?
4. What does becoming a "socially legitimized" Museum mean to you? What does success in this goal look like?
5. Do you have any preference on using your social media platforms? If so, which social media platform do you want to build up?

By conducting the interview questions, Ana had reflected some of issues toward the museum website, which also helped us determine the objective of our analysis.

### *Tools (Google Analytics)*

Ana has granted our group the access to the Google Analytics of the Museu Nacional d'Art de Catalunya, it provides an overview of the website traffic information and gives us insights about what metrics we could apply for displaying the website performance.

After selecting the metrics and segments through Google Analytics, To better deliver our findings, we used Google data

studio to integrate the data and create visualizations. This platform enables us to turn our data into an informative and easy to read dashboard, presenting the website performance.

### *Metrics*

These metrics were applied to every chart when conducting the dashboards through Google data studio: Users, New users, Sessions, Average Session Duration, Bounce Rate, Browsers, Device, % New Sessions, Page/Session, Pageviews, Unique Pageviews, Average time on page, Ecommerce conversion rate, and Product Revenue. Two dashboards show the performance of the website in the past month and will update regularly. The dashboard also includes filters like date range, page title, device category, and browser for customization.

### *Limitations*

- Our group couldn't analyze the specific sales of ticket because we were not sure if we saw the total web revenue through Google Analytics;
- As a group, we are not Spanish or Catalan speakers, and we could only read pages in English.
- Covid 19: The pandemic affects the general website traffic; therefore, we could not ensure whether the data is objective enough to present the web performance due to the unusual situation.

# Results

## Part One: Overview of Dashboard

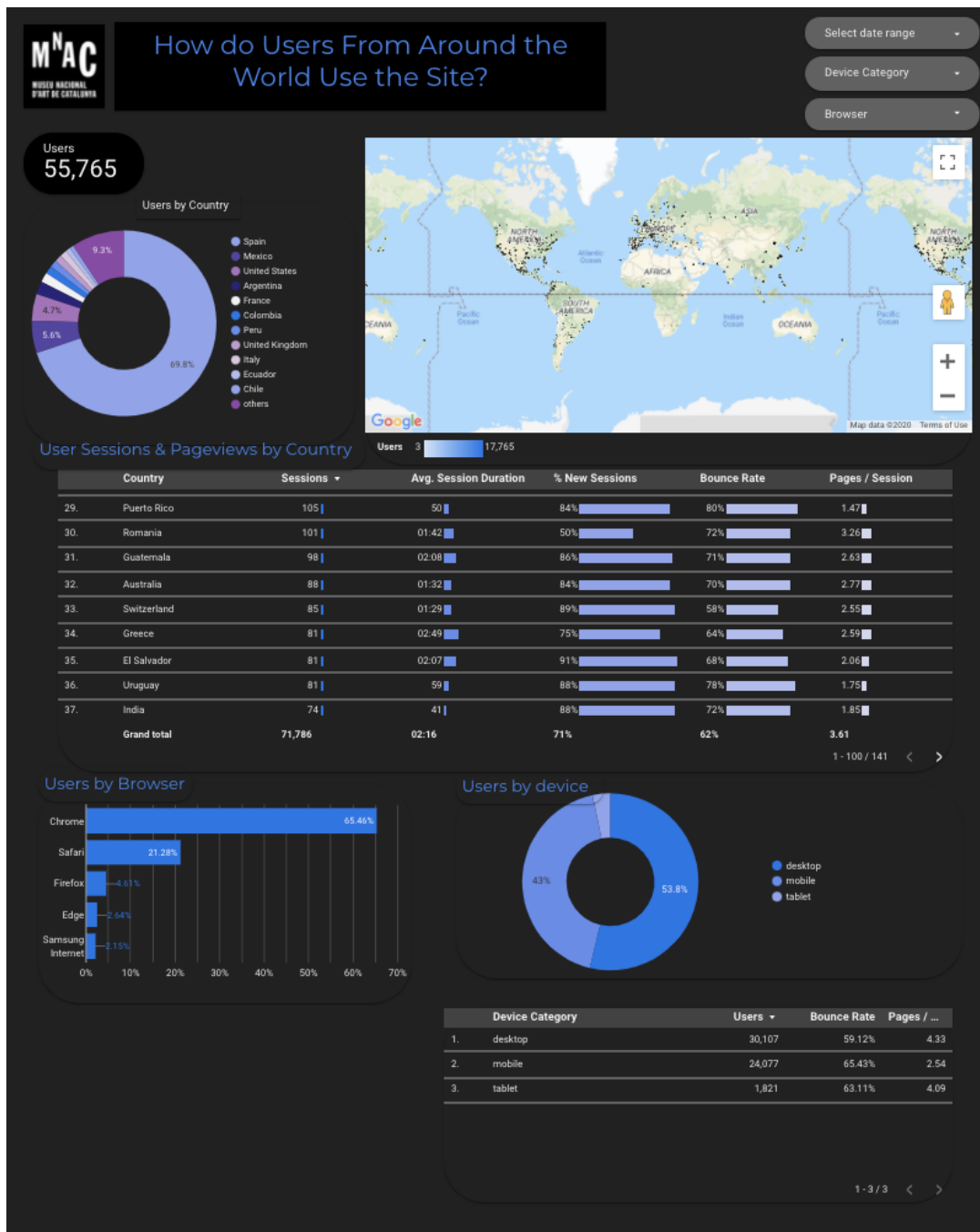


Figure 2 The Page Audience Section of the Dashboard

### *Page Audience*

Using the first page of the dashboard, the museum will be able to see exactly who is viewing their website. The museum will be able to filter the data by a date range, device type, and browser type. The highlight of this page is a large map that displays where in the world users are at the chosen date range. In addition to this map is a graph showing the percentages of where the users are from, and what devices and browsers they use. Finally from the table the museum will be able to see the sessions, average session duration, the percent of new sessions, the bounce rate, and the pages per session by country.

### *Content Overview*

Using this page should give museum staff information about who is visiting the site and how they are doing so. The default date range for both pages is the last 28 days. Through the device category, museum staff can see how the website is being used from desktop, mobile, and tablet users. Through the browser filter, the museum staff can see the information specific to certain browser types, for example google chrome. This page highlights where visitors are viewing the website from. It is intended to focus on how long these visitors are staying on the site, how often they are moving around the site, and comparing which countries, browsers, and devices are using the site most. Figure 2 shows the Page Audience page with the default date range of the last 28 days, you can see that most viewers are from Spain, Google Chrome has the most visitors by browsers, and there are more desktop visitors than mobile or tablet.

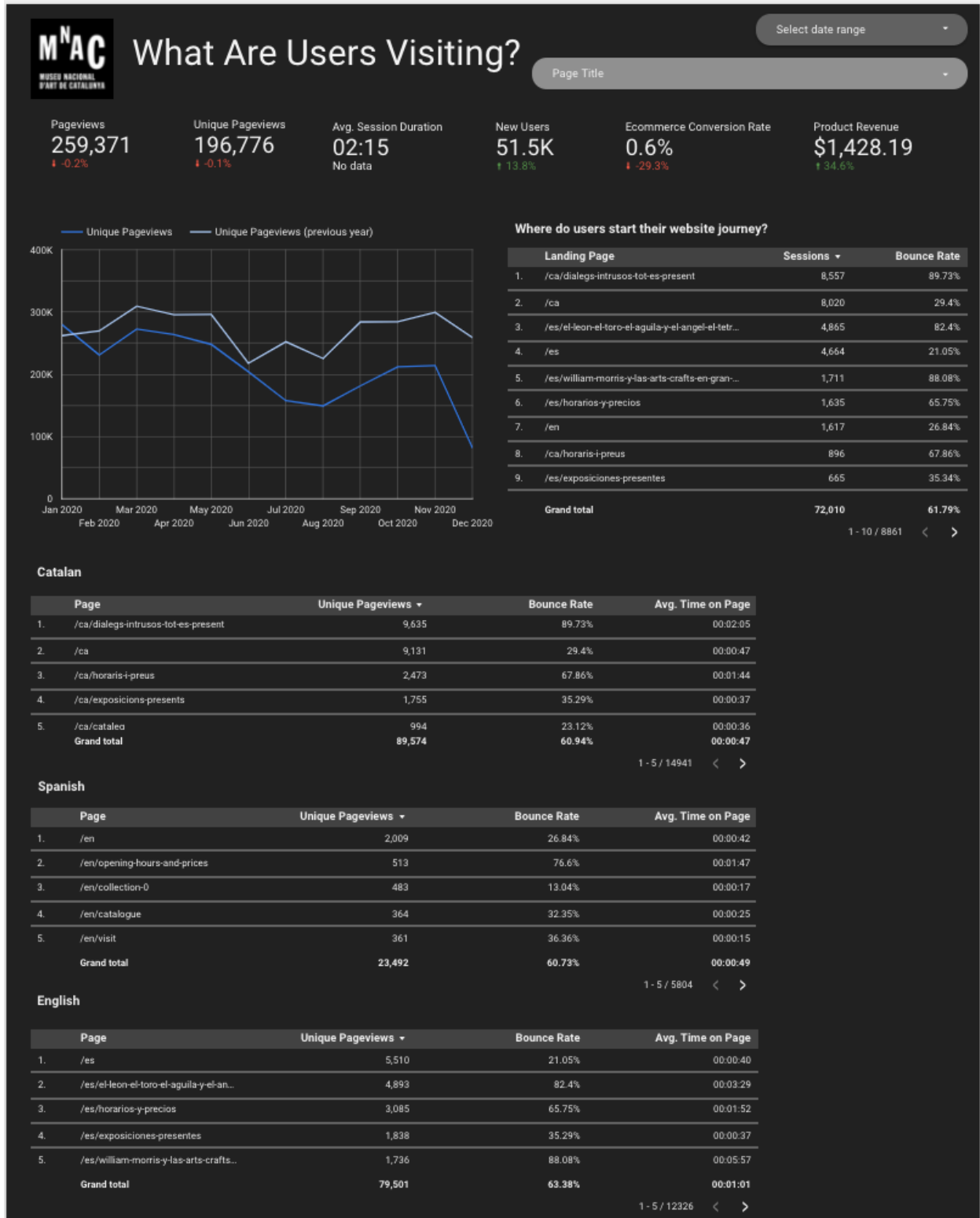


Figure 3 The Content Performance Section of the Dashboard

### *Content Performance*

The second page of the dashboard is concerned with how users are using the website. There are two filters on this page so the museum can choose the date range they are looking at, as well as view the metrics for specific pages. This page measures the pageviews unique pageviews, average session duration, new users, ecommerce conversion rate, and product revenue right at the top. Then a line graph below displays the unique pageviews of this year compared to the unique pageviews of the previous year. Next to this line graph is a table that displays the sessions and bounce rate for specific pages. The three tables on the bottom of the dashboard page showcase the unique pageviews, bounce rate, and average time on the page for specific pages from the Catalan website, the Spanish website, and the English website.

### *Content Overview*

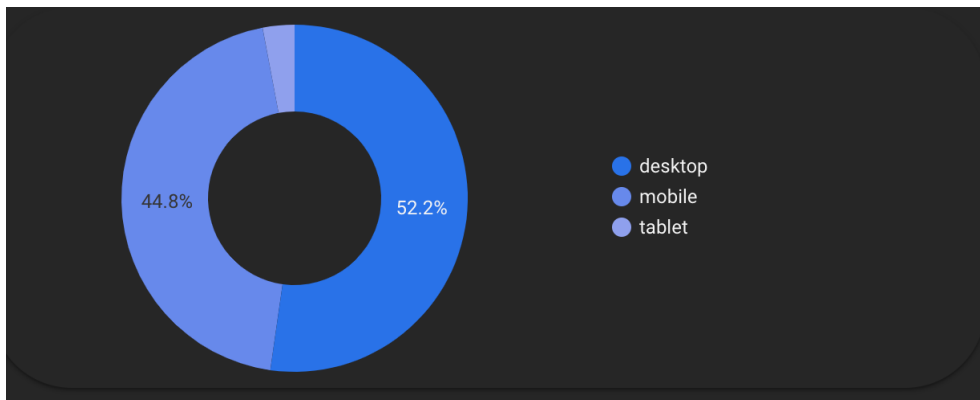
The content performance page of the dashboard was created to see how the website functions for its users. The filters will allow museum staff to set a date range, the default is the past 28 days, and to see the information for specific pages. The six metrics at the top are a quick look at the website over-all, or for the chosen page using the filter. These metrics are compared to the previous 28 days, underneath the metric is a green percent increase, or a red decrease. The page also features a graph of unique page views over time compared to the following year. This graph is extremely important in terms of comparing this year to last year, pre-pandemic. Over-all the unique pageviews are fewer this year. This page also shows metrics for where visitors begin their journey on the website and the bounce rate from there. As Figure 3 shows, the catalan landing page has the highest number of sessions for their landing page. Following this is metrics specifically for each version of the website; Catalan, Spanish, and English. Catalan pages have

higher page views, then English, and then Spanish. The english site has a higher bounce rate, and a higher average time on page.

## Part Two: Key Findings

In terms of the result, by conducting data on the dashboard, the key findings respond to different website areas. The information we generated on the dashboard is based on the website traffic from the past 28 days.

### 1. Device Choice



	Device Categ...	Users ▾	Sessions	Pageviews	Pages / Sess...	Bounce R...
1.	desktop	29,510	40,100	177,546	4.43	58.15%
2.	mobile	24,174	29,300	76,041	2.6	64.8%
3.	tablet	1,657	2,076	9,009	4.34	60.84%

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Fig.4-1, 4-2. Device category and performance

There are 44.8 % of all users accessing the website through mobile devices in the past month, and by customizing the date range, the number of mobile users still possesses half of the amount of all users. Besides, mobile devices have brought many individual sessions to the website, reflecting that the website's mobile interface is quite accessible to users. However, all of them are above 55% for each device's bounce rate, which means there is still significant room for the website to develop and improve the interface.

## 2. Foreign language

Catalan							
Page	Unique Pageviews	% Δ	Bounce Rate	% Δ	Avg. Time on Page	% Δ	
1. /ca	9,342	-48.9% ↓	28.64%	-62.5% ↓	00:00:47	-28.9% ↓	
2. /ca/dialects-intrusos-tot-e...	8,588	-	90.27%	-	00:02:09	-	
3. /ca/horaris-i-preus	2,547	-33.3% ↓	67.74%	-27.8% ↓	00:01:44	-19.7% ↓	
4. /ca/exposicions-presents	1,838	-44.4% ↓	34.87%	-57.9% ↓	00:00:37	31.1% ↑	
<b>Grand total</b>	<b>90,887</b>	<b>-15.7% ↓</b>	<b>59.27%</b>	<b>-29.3% ↓</b>	<b>00:00:47</b>	<b>2.1% ↑</b>	1 - 5 / 14985 < >

Spanish							
Page	Unique Pageviews	% Δ	Bounce Rate	% Δ	Avg. Time on Page	% Δ	
1. /en	2,019	-73.6% ↓	26.89%	-64.1% ↓	00:00:41	40.3% ↑	
2. /en/opening-hours-and-...	508	-88.2% ↓	75%	-19.1% ↓	00:01:51	-30.6% ↓	
3. /en/collection-0	475	-62.9% ↓	10.87%	-82.1% ↓	00:00:21	72.7% ↑	
4. /en/catalogue	360	-55.1% ↓	31.43%	-64.4% ↓	00:00:22	2.1% ↑	
5. /en/exhibitions	358	-70.7% ↓	46.88%	-41.6% ↓	00:00:27	-1.4% ↓	
<b>Grand total</b>	<b>23,236</b>	<b>-57.3% ↓</b>	<b>60.57%</b>	<b>-26.4% ↓</b>	<b>00:00:49</b>	<b>25.3% ↑</b>	1 - 5 / 5663 < >

English							
Page	Unique Pageviews	% Δ	Bounce Rate	% Δ	Avg. Time on Page	% Δ	
1. /es	5,521	-46.2% ↓	20.79%	-72.7% ↓	00:00:40	41.9% ↑	
2. /es/el-leon-el-toro-el-agu...	4,938	203.3% ↑	82.01%	-14.5% ↓	00:03:27	140.8% ↑	
3. /es/horarios-y-precios	3,175	-46.8% ↓	65.12%	-30.3% ↓	00:01:50	-10.8% ↓	
4. /es/exposiciones-prese...	1,873	-52.6% ↓	35.3%	-57.7% ↓	00:00:37	19.5% ↑	
5. /es/william-morris-y-las-...	1,734	113.0% ↑	88.18%	-9.7% ↓	00:05:59	171.3% ↑	
<b>Grand total</b>	<b>80,400</b>	<b>-22.1% ↓</b>	<b>63.07%</b>	<b>-26.8% ↓</b>	<b>00:01:00</b>	<b>41.6% ↑</b>	1 - 5 / 12499 < >

Fig. 5 Foreign language tables (in comparison to the previous year)

Google data studio enabled the creation of a table filter for displaying distinct data features. Therefore, as the figure indicating above, our group has split the page performance into three main languages that the website contains, which allows a more straightforward overview of how the website performs differently in three language domains. The bounce

rate of all landing pages regarding each language reviews under 40%, while in each language domain, some pages have a significantly high bounce rate, and one of the pages in Catalan even has a bounce rate above 90%. Our group noticed that most of these pages are from the museum collection pages by checking the pages with high bounce rates. This finding shows that rearranging the collection page is necessary; otherwise, these pages might affect the website traffic.

### 3. Collection pages performance

Since there are many pages with high bounce rates that belong to the website's general collection page, our group also took a look and created charts for displaying the overview of the collection page. Below is the chart showing the collection traffic this year (2020) in comparison to 2019.

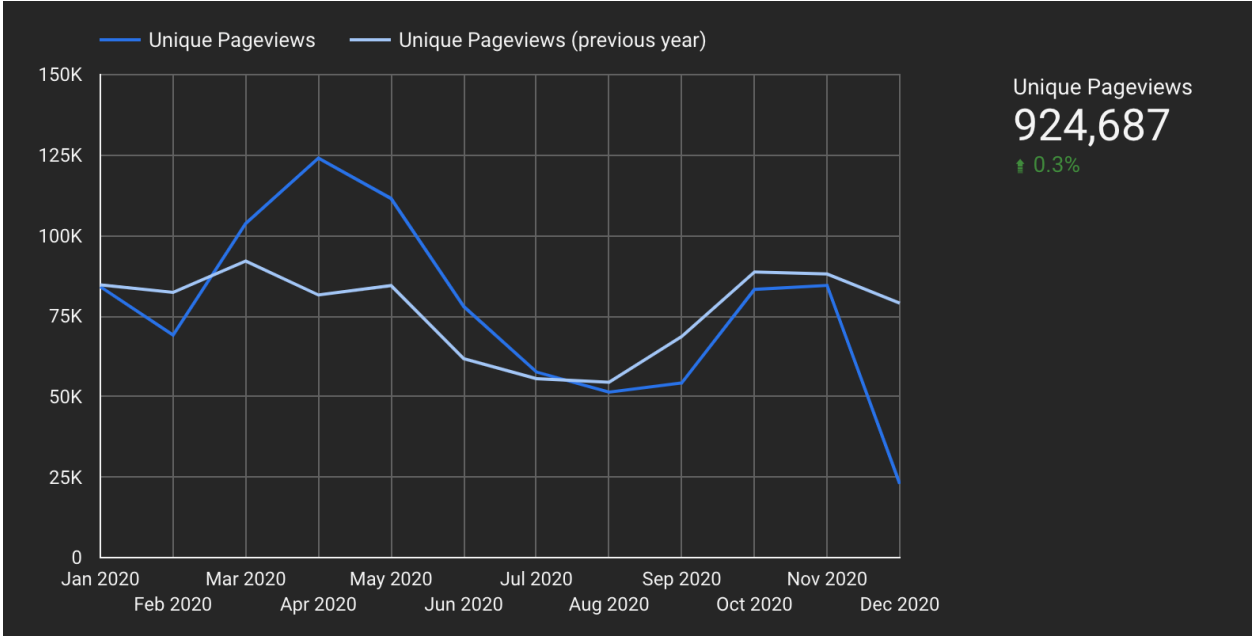


Fig. 6 Collection pages performance (in comparison to the previous year)

This graph indicates the collection page has increased mainly from March to July compared to the previous year and then

started to decrease during summer, and it began to rise again since August. Therefore, the trend of the unique pageviews in both years reflects the importance of the online collection as a resource for educational purposes; teachers, researchers, and students might access the collection page looking for sources for their studies. Besides, due to the COVID lockdown in early spring, it somewhat stimulated the website's visit and the collection page, so that the unique pageviews in April 2020 have reached the highest point overall.

#### 4. Covid pandemic affects the website traffic in general

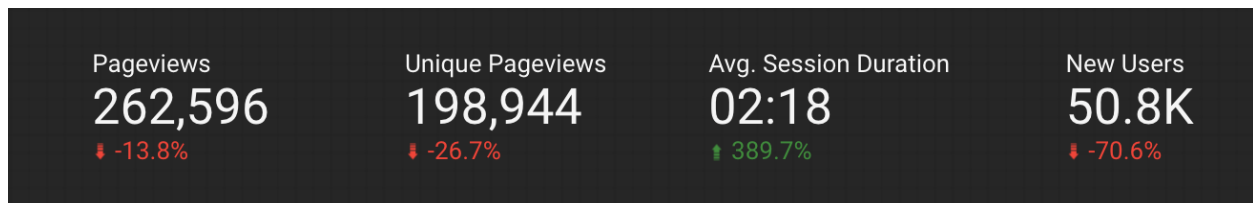


Fig. 7 Overall content performance (in comparison to the previous year)

Looking through the comparison between the overall content performance this year (2020) and last year (2019), besides the large decrease of the number of new users on the website, the page views and unique pageviews also decrease. Besides, the Catalan pages get the highest number of views, followed by English and then Spanish, while each page's page views still decrease compared to the previous year. Although the average session duration on the website is more than two minutes, which indicates that users are still willing to browse and interact with the website, the sharp reduction in new users has still lessened the general website revenue.

## Recommendations

The recommendations this project has outlined exists in four improvements: a simplified layout, improved language support, enhancing the information of the collection, and building up the mobile interface.

### *Simplified Layout*

The current way the website functions results in an extremely large amount of pages. This makes navigation confusing to the viewer, and analytics confusing to the museum. Simply using vertical scrolling with pages that include more information will significantly lower the amount of existing pages. Decreasing the amount of pages will increase the page views and decrease the bounce rate.

### *Improved Language Support*

As the results of the Dashboard analytics have shown, countries that speak languages outside of the three versions of the website offered (Catalan, Spanish, and English) are contributing less to the overall website. This means that countries outside of Spain, Mexico, and the United States are interacting less with the website and the e-commerce of the museum. A website that supports many different languages will increase traffic and interaction with the outlying countries.

### *Enhancing the Information*

One of the main goals of the website is to display the museum's collection. As the website currently functions, the collection pages get little traffic, have the highest bounce rates, and are only offered on the three versions of the website in Catalan, Spanish, and English. Improving the language support will help increase traffic, but a focus on the content on the collection pages will help as well. Featuring more content on the collection and encouraging exploration of the collection pages will decrease bounce rate.

### *Build up the Mobile Interface*

Mobile users took up 44.8% of visitors of the past 28 days. This means that half of the websites visitors visit using their mobile devices. While most of the visitors come from mobile devices, the mobile bounce rate is higher than that of desktop and tablet, and they visit a significantly lower number of pages. Our suggestion to increase the sessions and pageviews for mobile traffic is to create an interface specific to mobile devices.

## Conclusion

Through the use of a custom designed Google Analytics Dashboard which tracked key metrics across all three language variations of The Museu Nacional d'Art de Catalunya website (Catalan, Spanish & English), along with direct usability testing of the site itself, several important insights pertaining to the online audience, and how they use the site, were discovered.

In regards to the global viewership of the website, the overwhelming majority of visitors across numerous different timeframes were located in Spain, Mexico and the United States. These findings indicate that the limited availability of alternate language content, ie, French, Italian, Portugese, German, etc. is having a noticeably negative impact on website interaction from those regions, despite the close geographic proximity. More robust language support is highly recommended in order to reach more potential visitors, and ticket-buyers, from neighboring locales.

Furthermore, the website's current "carousel" layout, with extremely truncated pages and menu-heavy navigation, requires a high amount of clicking and searching. This seems to account for the brief time spent on many individual pages, and high bounce rates throughout the website. A more streamlined site design, focused on easy vertical scrolling through collection galleries, as well as Museum information pages, is highly recommended to improve the experience of online visitors and increase their engagement with the website at home and on smart devices.

These "long-form" scrollable pages are evident in some sections of the mobile layout, and increased utilization should allow for two key improvements over the existing site design. More content per page should require less pages in total, hopefully reducing the resources required for additional language

translations of the full site. Also, the scrolling format is more conducive to adding better details and information about the artwork being presented online.

It is clear from these findings that the current website of The Museu Nacional d'Art de Catalunya is not effectively catering to some of their closest European neighbors, while also lacking a user-optimized layout to enhance the experience of their online visitors. However, the recommendations espoused above should result in a more appealing, and engaging, platform for their digital audience.

# Appendices



Figure 1.1 The Landing Page of the Website with the Language Menu

Link to the dashboard: [https://datstudio.google.com/s/pvYaQI\\_WkzA](https://datstudio.google.com/s/pvYaQI_WkzA)

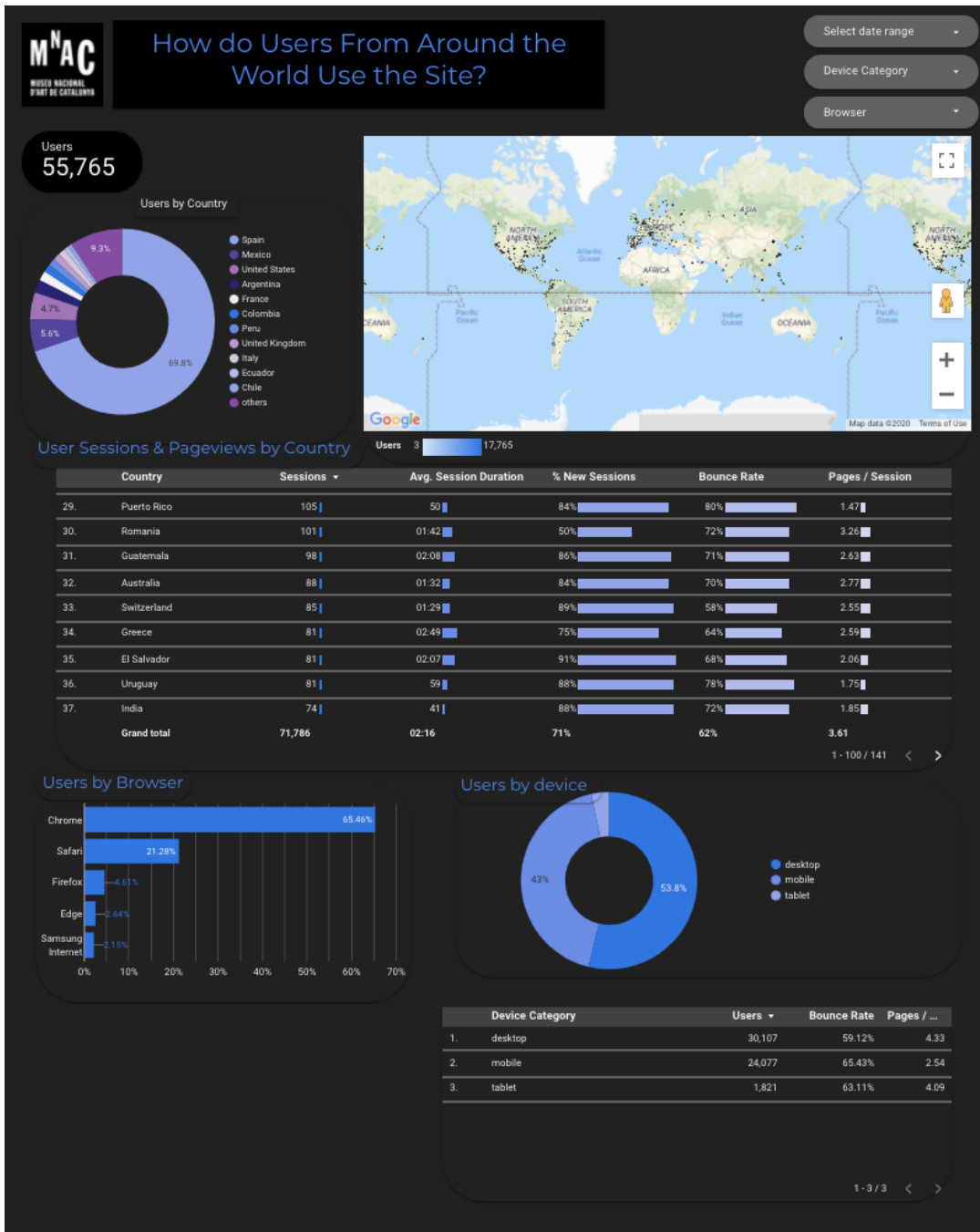


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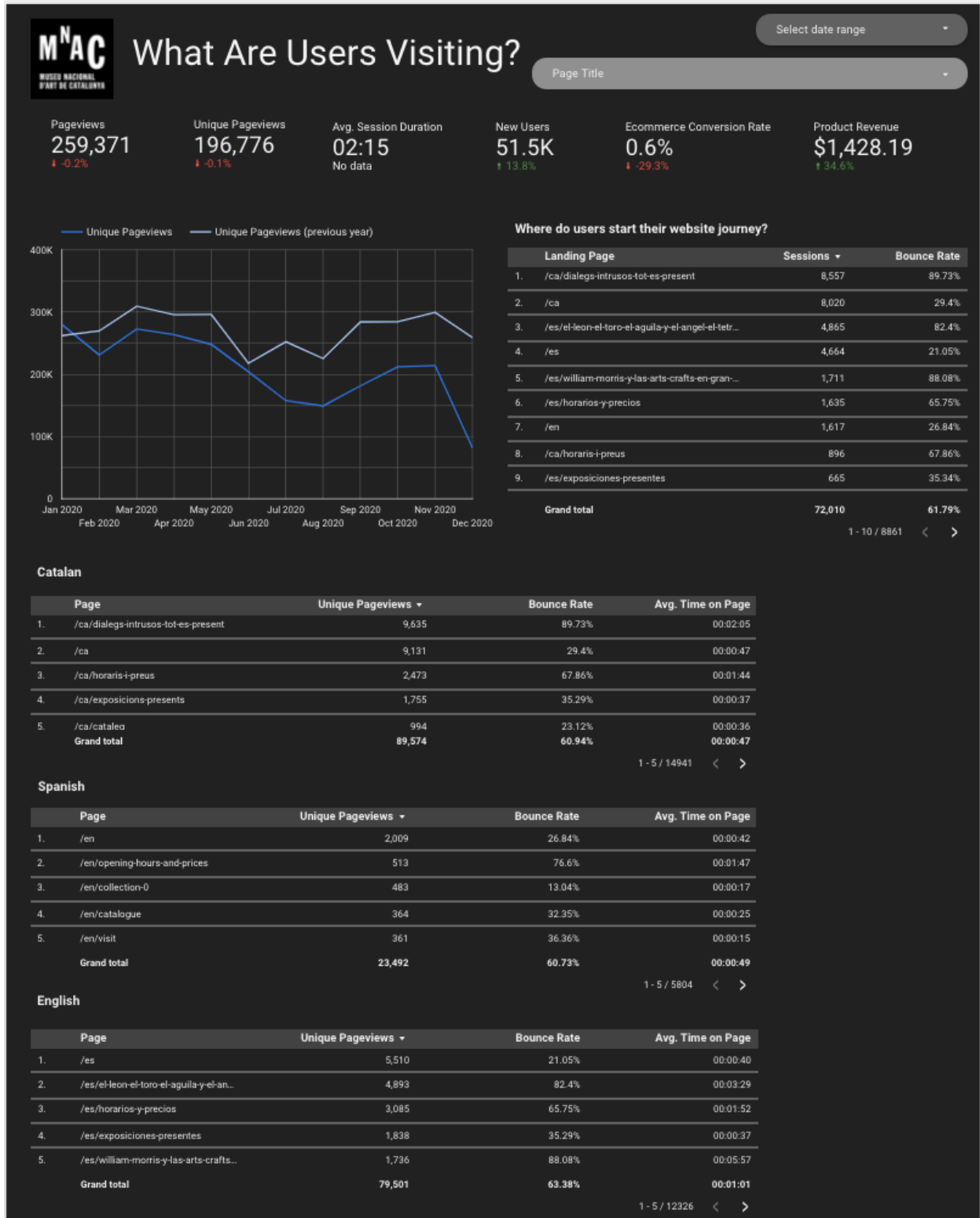
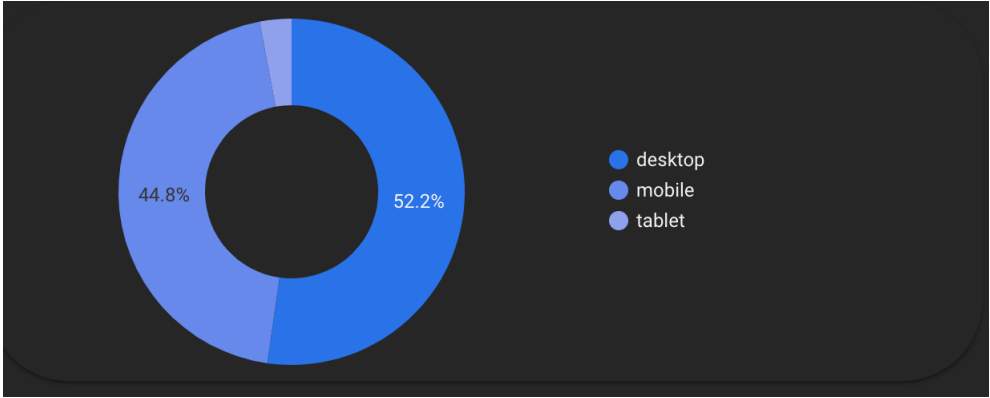


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Figure 4-1, 4-2. Device category and performance

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3. /ca/horaris-i-preus	2,547	-33.3% ↓	67.74%	-27.8% ↓	00:01:44	-19.7% ↓	
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3. /es/horarios-y-precios	3,175	-46.8% ↓	65.12%	-30.3% ↓	00:01:50	-10.8% ↓	
4. /es/exposiciones-prese...	1,873	-52.6% ↓	35.3%	-57.7% ↓	00:00:37	19.5% ↑	
5. /es/william-morris-y-las-...	1,734	113.0% ↑	88.18%	-9.7% ↓	00:05:59	171.3% ↑	
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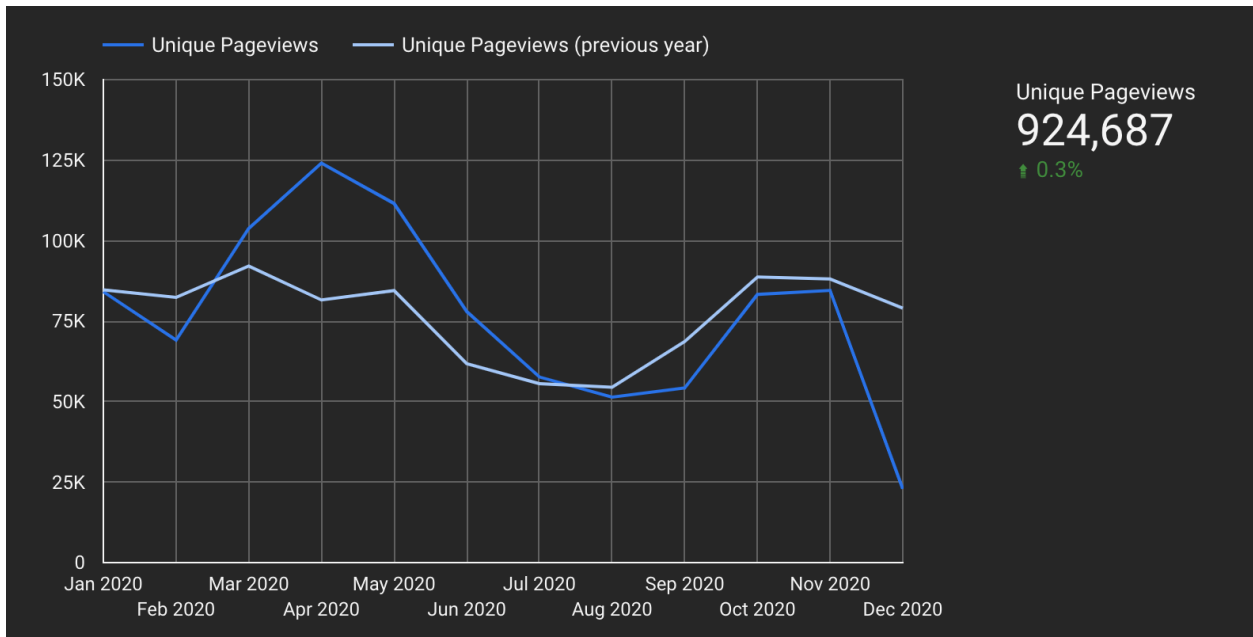


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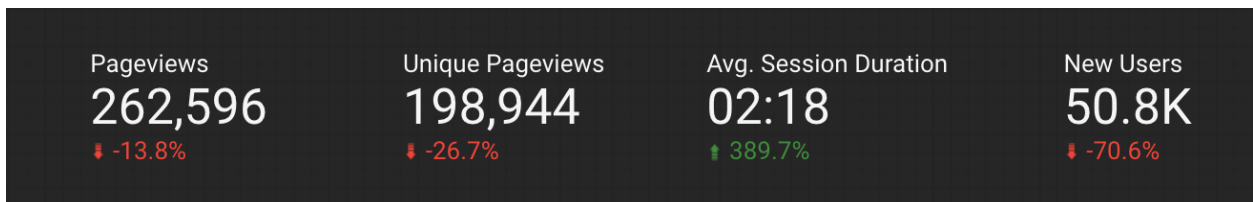


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