Abstract

**Purpose.** The aim of the paper is to present the work the Croatian History Museum (CHM) has done to preserve cultural heritage and the use of its digital strategy to present that work. This was applied in the CHM’s plan as the digital editorial board was formed to oversee and curate the Museum’s presence on the social media and the internet.

**Approach/methodology.** The paper showcases the increase of online visitors and users that consume cultural heritage on online platforms through the examples of virtual exhibitions, social media posts and gathered data. The maintenance of a specifically targeted virtual identity of a museum helped in this regard, which is evident in the increase of online visitors. Data was gathered and interpreted by using Google Analytics and Instagram analytical data by the author throughout 2020, and the data suggest that digital museums have a lot of potential, in particular with modern online users.

**Findings.** The data presented in the paper shows that the online visitors were interested in the work of the Museum and that the promotion thorough social media generated online visitors as much as a real-life exhibition. It shows the interest in digital museums and the promotion of museum work online.

**Research limitations.** The author recognizes that the data presented in the paper is gathered only from one source as the author could not access data from other similar institutions which would have been used for comparison.
Originality/value. Through empirical examples, the paper showcases how useful a virtual museum can be in raising interest in cultural heritage. This is especially important in times when people cannot attend large social gatherings. Also, the paper describes the events and the work guidelines given at times of crisis such as earthquakes, which the author witnessed himself and participated in.

KEYWORDS: cultural heritage, digitization, history, museum, social media, virtual museum

1. Introduction

The beginning of year 2020 was quite hectic if you consider the onset of the COVID-19 pandemic. However, it became even more stressful when, on top of that, a strong earthquake damaged Zagreb and, later on, another devastating earthquake struck Central Croatia and further devastated Zagreb and its old buildings and museums. These problems piled onto the older well-known museum problems such as working with small exhibition spaces and struggling to attract new visitors to the Upper Town baroque Palace Vojković-Oršić-Kulmer-Rauch. All of these obstacles required a new perspective and a new way of museum operation by switching to digital and virtual space. The digital editorial board, that was already in place before the beginning of the year, had previously made steps towards promoting the Museum’s work online. But after the March of 2020 this work intensified even further to promote the immediate protection of museum objects as well as continue to open exhibitions, but this time virtually using the Museum’s website and social media platforms.

This paper showcases the results of the new approach of the CHM to its virtual and digital presence on its website and social media platforms. Data was gathered using Google Analytics as well as Instagram. This proposes a limitation as it does not have a relevant source of other historical museum data to compare it with, but strives to amend this shortcoming by providing the CHM data for the past three years. This paper analyzes the importance of having paid posts and using paid promotions on social media by comparing online visitors of a virtual exhibition, to the real-life exhibition of the CHM that was opened before the COVID-19 pandemic during the best visited month for the Museum. It also has to be stated that the virtual museum still cannot reproduce real-life exhibition visits, but it can try to replicate the museum experience. The situation regarding the immediate response after the earthquake and the working in groups was described in this paper from the perspective of the author who witnessed the events first hand or engaged in them personally.

2. Old problems

The CHM is situated in the Upper Town of Zagreb in a baroque palace built in 1764. The Museum was formed in 1846, and after years of changing locations and moving from one cramped space to another, it finally moved into the Palace Vojković-Oršić-Kulmer-Rauch in
Matoševa 9 street in 1959 (Szabo 1998, 30). The biggest reconstruction work on the Palace was done during the 1980s, and in 1991 the Museum was merged with the Museum of the Revolution of the Croatian People and the number of museum objects almost doubled. This meant that the Palace, which was already too small, became even smaller. Until today, over 350,000 museum objects are held in the CHM, which have never had a permanent exhibition since its inception (Škiljan 1996, 19).

Aside from the problem with lack of space, the Museum was also never in the media enough to promote its exhibitions or to promote its work to the audience. This meant that the public was not aware where some of the most important historical items from the 19th century Croatian National Revival were stored and preserved. This also meant that there was hardly any established online presence, let alone a digital image of the museum. Exhibitions never had enough finances for a marketing promotion of an upcoming exhibition, other than promoting it right before the opening (Pandžić 2008, 9).

As it was stated before, the museum collections grew immensely in 1991, and until 2021 the number kept rising. This means that there are around 70% of objects that were never presented to the public. This problem became even more complicated as a large number of objects had to be restored and exhibited adequately with regards to the strict restorer guidelines. Thus, some objects became prominent in every exhibition and were frequently used in all sorts of publishing material, while others were pushed to the sidelines either because they were harder to exhibit or expensive to restore (Pandžić 2008, 9).

Nevertheless, the CHM always tried to mitigate its complex situation, which is common to many museums throughout the entire world. Creating the Museum program in such a way that there are two big exhibitions and three smaller ones every year meant that the Museum objects can rotate more frequently. This way, even though there was no permanent exhibition, it became clear what the core of the Museum objects were, which clarified how to plan out the permanent exhibition in the future. It was also a mitigating factor that the Museum had an Internet website where virtual exhibitions could be published which was also used to exhibit objects and elaborate topics that were not necessarily attractive to the public. The other was using social media to attract followers who are interested in Croatian history and already used Facebook, but not to the extent they could have. All of these situations were in place before the pandemic and were already a big problem for the museum which has 31 employees, of whom 14 are curators (Pandžić 2008, 9).

3. Croatian History Museum and COVID-19

The first confirmed patient infected with the COVID-19 virus in Croatia appeared on February 26, 2020 which immediately transformed the public perspective of the disease that was previously talked about in the media as being far away (Lazić, Lazić and Kolarić 2020, 44). For the CHM this meant that the precautions were to be made even before the official instructions had been given. The structure of the museum professionals was looked at and groups of most endangered workers were identified and notified to stay aware of the situation and prepare for changes. When the official Croatian Institute of Public Health and the Government of the Republic of Croatia issued warnings and new forms of working in
interchangeable groups, it was done more easily as these had been previously identified.  

The groups were switching their work in the Museum and from home every week. The group that worked in the Museum was spread out so every person was alone in their office as well as without contact with other workers when coming to the office and had to wear masks the whole time they were within two meters of anyone inside or outside. The group at home had tasks to keep working remotely, and specifically the digital editorial board of the Museum website and social media accounts made the plan to push the digital promotion of the Museum even further. Posting content on Facebook as well as the newly opened Instagram page was scheduled and made to promote heritage items from Croatian history. This was done to keep engaging the Museum followers with positive content and to promote the big number of objects from famous Croatian historical events and historical figures (Babić and Babić 2020, 25-32). A plan was made to film a virtual walk-through of, at that time, the current exhibition Varvaria/Breberium/Bribir: Historical Layers Revealed as well as guided tours with curators that would explain the process of working at the exhibition and its significance. Furthermore, there were plans to start making more video content and publishing it on social media to make the Museum work even more available for the online followers.

The work on the virtual museum was also accompanied by planning out the digital image of the Museum on all of its online platforms which the author planned out with the digital

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**Figure 1.** Example of a post on the CHM Instagram page with context and visual representation of objects (Source: CHM Instagram page)

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1 The working regulation was made by the Government of the Republic of Croatia, but organizing in groups was already in place with the Museum’s Plan of Emergency Management which the author also wrote. In this Plan groups of evacuation teams were suggested, which were used by the Museum’s management during the first COVID-19 wave as a template for organizing working teams. This kind of preparedness helped structure the COVID-19 teams that worked from home and that worked in the Museum.
editorial board. The way the Museum presents itself to the public shapes the way the public perceives it, and in the case of the history museum, it can also define the way the public grasps its national history and their connection to it (Markić, Bijakšić and Bevanda 2018, 235-237). Presenting an object that is over hundreds of years old or explaining the significance of historical figures from three hundred years ago can be challenging and the average visitor does not always get the importance or the relevance of it (Peroš 2015, 82-91). In the current digital age this can be mitigated with online platforms and visitor specific content that interests them. The CHM did not want to sacrifice the scientific and professional work for the social media but tweaked it to make sure the information was communicated through visuals as well as text materials (Stuedahl and Lowe 2015, 61). This means the visuals were planned out to be used for communicating information, so the textual content could be shorter and more user friendly on the social media platforms (Figure 1).

All of these features were made with the interactive part in mind so as to create the interaction the public has with museum objects in real-life exhibitions. This interactive part was done through quizzes (Figure 2), videos, comments on social media posts, and Q&A sessions from the Museum (Pruulmann-Vengerf and Aljas 2011, 111).

All of these plans were made for teams working from home and in the Museum offices under the assumption that this would be made also in the exhibition spaces as well as storage spaces. But this all changed in March when an unpredictable natural disaster struck Zagreb and Central Croatia.
4. Croatian History Museum and the earthquakes

The first earthquakes struck Zagreb on March 22, 2020 with the magnitude of 5.5 and 5.0 on the Richter Scale. The epicenter was about 7 km from the city center and it destroyed and damaged almost all the buildings in the Zagreb center, as well as the Croatian History Museum’s Palace Vojković-Oršić-Kulmer-Rauch. It was the strongest earthquake to hit the capital since 1880, and around 25,000 buildings were affected. Of the total, 4,998 have a yellow tag and 1,342 the red tag, with yellow being a building that has parts with structural issues, and the red being a building that is completely uninhabitable. Unfortunately, one person was killed, and 27 others were injured. All of this happened at the height of the first wave of the COVID-19 pandemic during which everything was locked down and people worked remotely from home wherever it was possible (Šavor Novak, Uroš, Atalić, Herak, Demšić, Baniček, Lazarević, Bijelić, Crnogorac and Todorčić 2020, 845).

The plans for creating video content and guided tours in Museum spaces that were already in place were postponed, and the focus was switched to immediate help, first to the Museum professionals and then to the Museum itself. The evacuation teams that were in place had to be adjusted for functioning during the pandemic restrictions, and they immediately managed to get to the Museum building (Terbush Watson 2010, 2). The teams working from home continued work on making the public aware of the situation the Museum found itself in, as well as going on with publishing posts on all digital platforms to continue the work of the Museum virtually.

After the officials gave the permission for the Museum evacuation team to enter the building, it was established that the building was structurally heavily damaged, but after careful inspection there was no heavy damage found to the objects that were in the exhibition space, or in the storage rooms. The strict policies the CHM follows for exhibiting items paid off, as they saved a lot of items that were exhibited or stored. This solidified the Museum’s work on promoting heritage protection and its insistence on adhering to every single strict restorer guideline when exhibiting objects (Dorge and Jones 1999, 31). The online and digital work of the Museum professionals also switched to promoting heritage protection work as well as cooperation with other museums and professionals in Croatia as well as internationally (Figure 3). All of these decisions were made while working in groups remotely and with evacuation teams in the Museum Palace.

Figure 3. Post promoting conservation work done on the Museum that became popular very quickly on the CHM Instagram page (Source: CHM Instagram page)
The biggest challenge was to coordinate the work of the teams at home and the team in the “field”, so to speak. What the team did in terms of protecting and evacuating museum objects was promoted online to show the readiness of the Museum workers to respond in stressful situations and under pressure. This brought forward the public awareness of what museum professionals do and how they protect heritage objects. Some Museum staff had experienced working on protecting heritage objects during crisis, as the CHM had a strict team regulation policy during the Homeland War. And this was also a time when solidarity within the museum community manifested itself as a lot of museums from Zagreb, as well as Slovenia, sent materials that helped greatly in the process of packing and evacuating items.

The December earthquake that struck Central Croatia with the magnitude of 6.4 on the Richter Scale affected the areas around Sisak, Petrinja, Glina as well as the towns and villages in that area and killed seven people while injuring 26 others, and leaving huge areas destroyed, damaging the buildings in Zagreb even further (Ros Kozarić 2020, 7). Thus, the Vojković-Oršić-Kulmer-Rauch Palace, which had some restoration work done on it, was damaged additionally. Some of the museums in Central Croatia reported heavy damage and people from all around Croatia and Europe organized themselves to send immediate help to the many people that had lost their homes and livelihoods. Once more, the solidarity of the Croatian people manifested itself during times of crisis, and this was also done in the museum sector. Some museum workers organized among themselves to send help to Sisak, Petrinja and Glina. Also, the intervention of The Italian Carabinieri Department for the Protection of Cultural Heritage, or the so-called Italian Blue Helmets, helped evacuate many heritage objects in the area, which brought forward the discussion in the Croatian museum sector of the need for such an evacuation team on the national level. The issue of protecting cultural heritage is not a new one or just a museological one, as it has become one of the main tasks of even some military units around the globe (Jasperro 2015, 92-95).

5. Going Digital

The switch to digital content and virtual exhibitions meant that the content had to be adjusted for online users but without sacrificing the historical significance and scientific research museum professionals put into it. It was not just about publishing pictures and visuals but making them interesting and easy to consume on social media and the Museum website. It was noted that a lot of text in the posts was not read by the users, so the part of the information that was supposed to be conveyed in text was adapted into

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3 All of these events were accompanied by social media posts that promoted this kind of work. The online public responded quite well to it by liking the posts and engaging in comments.

4 The Croatian Mountain Rescue Service participated in evacuating museum objects from damaged buildings. This prompted some museum professionals to talk about further education and training for this kind of intervention but within the guidance of the Croatian Ministry of Culture and Media.
visuals. This was found out through the Q&A sessions with the followers on the social media platforms. This meant that the visuals were interactive, the text in the visuals was interesting for quick reading in only a couple of seconds, judging by the attention a regular user gives a random post on social media. This kind of a visual is usually meant to be an eye catcher so, if it is interesting, a user who wanted to know more would read the whole text under the post, or, in some cases, in the story function of the social media platform (Stuedahl and Lowe 2015, 64). Furthermore, it was noted that users liked to interact online, thus the content was adapted in the form of quizzes, give-away prize games, Q&A sessions, puzzles and so on. This sparked interest with the online users to contact the Museum in the comment section and inbox messages which testifies that the online followers understood the new way of online presence of the Croatian History Museum and that the goal of making historical heritage closer to the public was beginning to make sense (Stuedahl and Lowe 2015, 65).

The whole brunt of the museum work was presented online, such as researching particular objects and presenting the new information to the public, analyzing different objects with the focal point of explaining their symbolism and historical significance, promoting the heritage protection done on the objects and on the baroque palace and similar. All the while it was important for the Museum to maintain the identity of a history museum (Pruulmann-Vengerf and Aljas 2011, 110). The CHM maintained that identity by promoting significant historical objects connected to Croatian national history and promoting virtual exhibitions.

6. Reassuring the Position of the Virtual Museum in the Future

During the COVID-19 pandemic all museums in Croatia shifted their work online, and the Croatian History Museum also had the adversity of having its baroque palace and exhibition space heavily damaged during earthquakes. Nevertheless, it became obvious that the real-life visitors also used various online platforms and that virtual visitors could replace them. Since the CHM started using Google Analytics in 2018, the data has shown a rising trend of online visitors (Chart 1). This was also used to promote various virtual exhibitions, such as in the case study of the virtual exhibition *Your documents, Please!*.

In this exhibition (Figure 4), a series of documents from the 19th to the 20th century was presented online, with structural explanations of the objects in a catalogue form, but also giving context of the development of identification documents. The topic might not be very attractive to a large audience, but the objects presented online were unique in the sense that many of them were published online for the first time, some presented to the public for the first time, and some of them were in such a condition that it would be difficult and

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5 The virtual exhibition *Your documents, please!* was published on the CHM’s website and is available on the following link: https://www.hismus.hr/en/exhibitions/virtual-exhibitions/your-documents-please/ [Accessed on June 29, 2021]. The promotion was done in accordance with the editorial board using social media platforms of the Museum.
expensive to exhibit them in a real-life exhibition. Thus, the digital editorial team developed a series of five Facebook and Instagram ads to promote the exhibition. Using social media such as Facebook and Instagram, the virtual exhibition *Your documents, please!* was promoted with paid posts in a campaign made by the author and curator Petra Braun. The paid posts went on from November 6 to 24, 2020. During that period a total amount of USD 108 were spent on advertising these posts which in turn attracted 3,472 online visitors. This data is shown on Facebook as well as Google Analytics of the CHM and diving deeper into those numbers gives an even clearer picture. Of those online visitors, 87% were new ones which means that in three weeks the Museum reached a newer audience in a very easy way. From that new audience, 66% of them are male and 34% are female, and the age group that was the biggest reached was between 35 and 65 years of age. The majority of that audience view the virtual exhibition on their mobile phones. For comparison, the CHM 2018 annual report states that the exhibition *Unreachable Heritage* in January had 4,762 visitors, of which 6 The data was gathered by the author of this paper using Google Analytics.
4,360 had free admission because of the Night of the Museum event on January 26, which is very popular in Croatia, and for the CHM it is the busiest month considering visitor count. Comparing these two exhibitions it is evident that the virtual exhibition Your documents, please! reached 73% of Unreachable Heritage’s total audience but had only a small budget for marketing. These numbers testify to the big potential in online visitors and virtual exhibitions that can be used to reach a new audience. This kind of information is very valuable for any museum as it shows directly how the visitor interacted with the exhibition, and the museum professionals can review this data and adapt to it in future exhibitions. The data-driven and analytical approach is what would be a great start for a virtual online historical museum. This type of focus of bringing the real-life museum experience online, as suggested by Biedermann (2017, 282-292), was the focal point of CHM online work. It was important to maintain the online visual identity of the historical museum and continue to adapt to new circumstances in accordance with the data-driven decision that became a new way of functioning for many museums in the world during the COVID-19 pandemic.

The total of visitors online increased in three years, and the jump from 2019 to 2020 is noticeable (Chart 2). There are many reasons for it, and the biggest three are that the Museum formed the editorial board for online platforms in 2019, the COVID-19 pandemic and the lockdowns started in 2020 when many businesses switched to online work and the editorial board had a smaller budget for marketing in 2020. These reasons resulted in the huge increase in online visitors which testifies to how the digital museum can function and that it does have an audience. The constant struggle to attract visitors and make them aware of exhibitions can also be solved by using online platforms and making objects and exhibitions available on mobile phones and computers. This can also result in the influx of redundant virtual exhibitions, but it is up to the Museum staff to decide what they want to do. Many new platforms, such as Google Arts & Culture, can be used by a museum to create virtual exhibitions and make them easily available for mobile users which make up for the biggest

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number of users on the Internet. If a museum has its own platform for virtual exhibitions, it is even better as they can be created more easily, however, those platforms and the required software can be expensive. Nevertheless, it is paramount to plan out those expenses in advance and try to make do with the current social media platforms which the CHM did (Lazzaretti and Sartori 2016, 960). For example, the Instagram account of the Museum used all its features that are available such as the IGTV, post, story and highlights (Figure 5).

For someone new to social media, it takes a lot of work to get to know the platform but it pays off in gathering new followers that would not know of the museum’s content otherwise. Recently, the Museum started to develop posts on Instagram as a sort of virtual exhibition by making a string of posts about a particular topic and sorting them using the...
highlights feature. The story function on Instagram is particularly useful as it boosts the amount of people who see your content, and you can make interactive features such as quizzes and Q&A sessions about the objects and museum work more easily (Figure 6).

All of these features are nothing new for someone who is a social media manager, but for museum workers who have many other responsibilities it represents another one on top of others. These features were used to make the content relatable and to engage the online users with the museum objects in a fitting way (Storsul and Stuedhal 2007, 130).

Table 1. Instagram analytics data of total online users and followers after changing the visual identity (Source: CHM Instagram page data)

<table>
<thead>
<tr>
<th></th>
<th>CHM Instagram page data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of reached users</td>
<td>59.2% increase</td>
</tr>
<tr>
<td>Total number of followers</td>
<td>13.5% increase</td>
</tr>
</tbody>
</table>

Table 1 shows the data on the CHM Instagram account visitors and followers after the digital editorial board started a new approach by posting and communicating with their audience on the platform. The virtual identity of the CHM page was adapted to this new style and has been maintained ever since. Comprising the virtual identity was a challenge that the editorial board decided to take because the content was streamlined for Instagram, in particular. The logo, the web address as well as the interactive quizzes and contextual storytelling with text in pictures for quick reading was used to engage large audience. The goal was to bring historical items and stories from national history closer to the followers. The big increase in the number users and followers in just a month showcases the success of this approach.

7. Conclusion

The last two years have been difficult for all museums, and for the Croatian History Museum, it represents a year in which new problems piled upon older problems. Not having a permanent exhibition, not having enough exhibition space, not being able to exhibit particular items and not having a big budget for promoting themselves are probably the main problems for many museums in the entire world. Having been struck by two devastating earthquakes at the height of the COVID-19 pandemic can seriously damage the workers’ morale, but it can also be an opportunity to see what can be done with the tools available at the moment. Switching online and creating digital content as a historical museum is a challenge, but also an essential way of functioning in the modern age of the Internet and social media. Using every tool available on the websites, social media platforms and many others, is a must for the museums to be present in the 21st century public sight. It can also be a way to research the digital space for new interesting topics as well as potential digital collections.

As the editorial board started to work on the new virtual identity for the CHM Instagram account, in just a few months’ time it paid off as the number of followers grew exponen-

Using photographs of objects as a vehicle for visual storytelling and keeping the text streamlined proved successful with the users as they responded in the Q&A session positively to it. As the virtual exhibitions became the focus, experimenting with paid online ads proved that a small budget in just two weeks can generate almost as many visitors as a real-life exhibition. Gathering and interpreting the data gathered through Google Analytics for the website traffic and Instagram analytics for social media traffic result in the conclusion that the online users are interested in virtual museums and are willing to participate in interactive ways such as quizzes, Q&A sessions, direct messages and commenting on posts. The case of the CHM doing its digital work should be compared to the data of other museums. The author could only provide the CHM data, but it suggests that careful consideration of a virtual identity and making interactive content that targets user-specific interest are the way to go for digital museums.
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Sažetak

Potres i pandemija povrh starih problema – rad Hrvatskog povijesnog muzeja nakon zagrebačkog potresa u ožujku 2020. i za vrijeme COVID-19 pandemije

Cilj. Svrha rada jest predstaviti aktivnosti koje je Hrvatski povijesni muzej (HPM) poduзеo s ciljem čuvanja kulturne baštine i predstavljanje tih aktivnosti digitalnom strategijom. To je primijenjeno u HPM-u osnivanjem digitalnog uredništva koje je nadgledalo i vodilo prisutnost Muzeja na društvenim mrežama i mrežnim stranicama.

Pristup/metodologija. Koristeći kao primjer virtualne izložbe, objave na društvenim mrežama i sakupljene podatke, rad predstavlja povećanje virtualnih posjetitelja i korisnika koji konzumiraju kulturnu baštinu na digitalnim platformama. Održavanje specifičnog virtualnog identiteta Muzeja pomoglo je tome povećanju, a predstavljeno je povećanjem broja posjetitelja na mrežnim stranicama. Podatke je sakupio i interpretirao autor s pomoću Google Analytics i Instagram analitičkih podataka za vrijeme 2020. godine, a pretpostavljaju mogućnost i potencijal digitalnog muzeja kod modernih korisnika.

Rezultati. Podaci pokazuju kako su mrežni korisnici imali velik interes za muzejski rad i da promocija društvenim mrežama generira velik broj posjetitelja jednako kao i stvarna izložba. Ukazuje se na to da postoji interes za digitalnim muzejom i promoviranjem muzejskog rada na mrežnim stranicama.

Ograničenja. Podaci korišteni u radu sakupljeni su od jednog izvora budući da autor nije imao pristup podacima sličnih institucija, a koji bi bili korisni za usporedbu.

Originalnost/vrijednost. Koristeći se empirijskim primjerima, rad predstavlja koliko koristan virtualni muzej može biti za podizanje svijesti o kulturnoj baštini. To je posebno važno u vrijeme kada ljudi ne mogu ići na veća društvena okupljanja. Isto tako, rad opisuje događaje i upute rada u kriznim situacijama kao što je potres, kojima je autor svjedočio i u kojima je sudjelovao.

Kljучne riječi: digitalizacija, društvene mreže, kulturna baština, muzej, povijest, virtualni muzej