Article

Museums without Visitors? Crisis of the Polish Museums during the COVID-19 Pandemic and Their Revival under the Digital Experience Offer

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Abstract: Museums, as many other organisations, froze during the lockdown. Museums offer insights into varying cultures and since no forms of culture can sustain without the engagement of audiences, participants, or visitors, the lockdown forced by the pandemic compelled museum authorities to look for new ways to reach audiences and establish relationships with them, thereby facilitating previously untapped forms of cultural participation. This worldwide experience of the pandemic undoubtedly accelerated the digital transformation of the entire cultural sector. To what extent these new opportunities have changed the forms of participation in the cultural realm remains an open question. This current research carried out in some of the largest Polish museums allowed us to conclude that the pandemic period saw a significant leap forward in terms of the involvement of digital technologies in popularising museum collections, as well as in seeking contact with audiences at various levels. At the same time, the reopening of museums resulted in increased attendances on an unprecedented scale. It could be said that the pandemic made us realise how global threats can, in a short span of time, take away the possibility of enjoying traditional forms of cultural participation, but at the same time enable the development of digital technologies that can significantly contribute to the popularisation of museum collections or exhibitions. This research was designed to find out whether museum audiences wanted a change in the way they experience the collections and exhibitions held in museums, and whether the digital experience created during the pandemic was attractive enough to compete with a personal visit to an art gallery. The results of the research clearly indicated that despite the rich digital experience offered in Polish museums, viewers still stated a desire to return to a "real museum". The pandemic allowed the museum authorities to learn novel administration techniques and numerous technological solutions that were previously never used have now become a permanent feature of regular museum operations. However, the reaction of the audiences after the lockdown was clear: they still wanted to enjoy traditional forms of cultural participation, valuing above all the possibility of personal contact with an original work of art in a museum gallery.

Keywords: museums in a pandemic; new technologies in museums; traditional cultural participation

1. Introduction

When the first case of coronavirus was diagnosed in December 2019, no one could have suspected the impact that the rapidly developing epidemic would have on our lives. In an effort to halt the spread of the SARS-CoV-2 coronavirus, countries around the world introduced a series of restrictions on economic and social activities. This process was no different in Poland, where severe restrictions were increasingly imposed, which also affected the cultural sector, including museums, which were closed to visitors on 12 March 2020. Museums were allowed to start operating under a strict sanitary regime on 4 May 2020, but another wave of outbreaks brought their renewed closure on 7 November 2020. They were reopened to the public on 1 February 2021, whilst maintaining a strict sanitary regime.

The museums experienced several unusual difficult situations that affected their operations during this period, including several months of complete closure and a long period of operation under strict new hygiene protocols that had never previously been applied. In a relatively short period of time, therefore, they had to cope with a wide variety of problems in virtually every area of their organisation. In a report from a research project on Polish cultural institutions during the time of COVID-19, Magdalena Pasternak-Zabielska concluded that although 75% of museums in Poland were ill-prepared to operate during the pandemic in terms of organisation and technical infrastructure, there was a fourfold increase in the number of museums offering online activities (with 40% conducting online classes in real time). While various types of museum educational activities experienced a significant decline throughout the period while the restrictions were in place, the increase in the number of online classes offered by museums during the pandemic was more than 380% [1] (pp. 6, 12). It is important to remember, however, that educational activities during the pandemic was only one area that underwent a profound transformation. Along with that, the promotion and marketing departments (known by different names in different museums) of the museums also changed significantly. There was a massive expansion in communication through digital channels, with museums not only expanding their presence on previously used social media, but also reaching out to new platforms. The best example of this change was the opening up to TikTok. This is an interesting example in that it demonstrated how difficult it was to transform institutions that were embedded in traditional forms of functioning and were reluctant to undergo changes in terms of managing their marketing strategies. Proof of this could be seen in the fact that among the largest (also the most highly subsidised and with the richest human resources) national (state) museums and those co-managed by the Ministry of Culture and National Heritage (of which there were 50 in total as of January 2023), only a few decided to open up to this communication channel.

Finally, taking a general look at the museums during the pandemic, as every other institution, they also had to undergo organisational change, adapting to previously non-existent operating conditions, and introducing strict hygiene measures for their staff that ensured their safety not only in epidemiological terms but also in terms of personal experiences, which was particularly difficult at a time of uncertainty and widespread fear for the future [2,3]. All these processes were to take place in parallel; no area of the organisation could be considered dominant and yet one context remained the most important: the visitors. It was the visitors who provided meaning to the daily work of the museums and it was they who always had to prioritised despite the multiplying problems and unknown threats. That is because audiences form the crux of a museum's existence, in a way legitimising them socially. Museums that are needed socially become an organisation of public trust, and by building social bridges and creating relations with their own social environment, they become a protection-free space for dialogue, the exchange of ideas, spontaneous discussions of values, and emotions (the most intimate impressions related to experiencing the world) [4–10].

Investigating the digital world of museums from a sustainability perspective is not only justified but also necessary. There are three areas in the theory of sustainability: the environment, the economic dimension, and the social dimension. During a time of climate crisis, the environmental dimension dominates, which is understandable. However, the question arises about the social dimension of sustainability, e.g., building cultural competences, tackling identity issues, and addressing the development of higher needs. All these issues are particularly relevant in the context of cultural heritage management, including museums.

2. The Literature Review

Despite changing social, economic, and financial conditions, the paradigm of the museum remains unchanged; the foundation of these institutions are their collections, the management and preservation of which have been extensively covered in the literature [11–13]. In

recent decades, an increasingly strong emphasis have been laid on the importance of viewer–consumer–user–co-creator, significantly changing the framework for the reception of artefacts collected in museums [14–16]. In recent years, practically no study on museum management has overlooked the use of new media in the context of communication strategies or building relationships with audiences [17–21]. The change in this respect has not only been brought about by the development of digital technologies, but has also been enforced by a generational change: museums have to discover media that provide attractive promotion of their collections among younger users [22] (p. 58). In addition, the nature of the new digital media is perfectly suited to modern societies showing much greater mobility than previous generations [23] (p. 3).

The presence of social media in museums, however, has a much deeper meaning than simply its use for communication processes or educational activities. It is about building a social network, a relationship between an organisation and its audiences [24], as well as interactions between audiences [25] (p. 141). This leads to a strengthening of ties in the organisation's environment, resulting in a stronger identification with the organisation, and thus increasing the importance of the museum itself within a social environment. This leads museums towards new avenues of engagement with their audiences, facilitating the exchange of ideas and thoughts, and opening up the possibility of creating an organisation that learns from its audiences, uses their ideas, and, as a further consequence, actually implements the idea of active participation [26–29], involving audiences in the creation of new exhibitions and events [30] (p. 115).

This growing bond with museumgoers, the museum's audiences, is crucial to an organisation's values and leads to it becoming more humanised, with the development of human bonds on one hand, and the support for self-development on the other, including the encouragement to seek one's own paths in order to satisfy one's needs and aspirations, or to build one's cultural identity.

During the pandemic, not only were museums cut off from their audiences, but people were also isolated from each other. This resulted in the breaking of the most natural ties that make us a community, and which give us a sense of family, work or a culture. It limited the traditional ways of communicating—talking at social gatherings, family gatherings or in the workplace. Meanwhile, "People like to share their experiences with others, especially positive experiences that make them feel better. Museums should do everything they can to make it easier for their audiences to share their positive experiences of visiting a museum with others. When friends and family share their positive experiences with someone, this can prove to be a motivation for the person gifted with this positive relationship to visit the museum themselves, often in the near future" [31] (p. 194).

It was precisely the awareness of this that led museums to devote so much energy and resources to building a "digital world" as quickly as possible to bridge the communication gap, not only through marketing, but also by creating tools for describing the museum's reality, including a platform for disseminating knowledge and the collections themselves, and developing new opportunities for interacting with art [32]. The museums surveyed in this study undoubtedly succeeded in achieving this aim, and the commitment of the teams working there made it possible to create a universe that would have been unimaginable just a few years ago.

There are many texts in the literature on the issue of the digital world during the pandemic [33–35]. Many of them make a valuable contribution to increasing knowledge about this new type of communication, the flow of information in the digital world, and the virtual experience of participation in culture and arts. It should be emphasised, however, that the present article adopts a sceptical attitude towards the possibility of replacing a personal visit to a real museum with even the most perfect digital experience offer.

3. Materials and Methods

The present article is the result of research carried out between June 2022 and March 2023. The chosen timing of the study was not accidental. On one hand, enough time had

passed since the reopening of the museums and the lifting of the COVID-19 restrictions to allow the museums to crucially reflect on that period, enabling them to evaluate the measures taken at that time in a more "matter-of-fact" way. The passage of time also made it possible to verify the oft-repeated pandemic judgements that once the restrictions were lifted, museums would operate in a hybrid mode, retaining the activities in the digital world that had been developed during the physical separation of visitors from the museums. The beginning of 2023 marked the conclusion of a full year of museum operations after the lifting of the COVID restrictions.

The aim of this research was to find out how the pandemic affected the development of the digital experience offer of the museums: did the pandemic have an impact on the development of the digital infrastructure of the museums, and, therefore, on the improvement of staff competences? In addition, the reaction of the audience was seen as a key issue: Could the digital experience offered compete with the "real museum", i.e., personal visits to the galleries? When seeking a balance between reality and the virtual world, would audiences side with the digital or real museums?

The following research questions were formulated to achieve the stated objectives:

1. How did museums build their digital experience offer? Did they look for new formats, or translate their existing offers into the digital language?
2. Were audiences keen to use the digital experience offer, and how did this translate into online attendances?
3. Did museums need to invest in digital equipment to adapt to the digital world?
4. Did the digital experience offer during the pandemic remain a part of the museum's permanent offer?
5. Did audiences interact with museums through digital communication?
6. How was the attendance shaped after the end of the pandemic restrictions?

The following hypothesis was formulated for the research: "Despite the significant leap forward in the development of Polish museums in terms of their digital offer, with improved infrastructure and professionalisation, after the end of the pandemic audiences will reject the digital offer and choose the real museum, not the virtual one". The author firmly believes that this conscious choice is an authentic representation of the principle of sustainable development—given the enormous role that the digital world play in our lives, we want to preserve the right to enjoy a unique experience in our dealings with art through a personal visit to a gallery.

The idea for this research was developed back in 2021, when the author had the opportunity to talk to the directors of several major museums in Poland. The result of those conversations was a number of unstructured interviews conducted from June 2022 with four facility directors and five employees working in other positions. On the basis of those interviews, a research questionnaire was developed and sent via e-mail directly to the museum directors, who then forwarded it to the individual departments concerned (museums use different internal nomenclature, but the departments contacted mostly were the marketing, communications, education, and sometimes HR departments). It was decided that only fully completed and returned survey questionnaires would be considered in the analysis. The criterion for recognising the responses from the museums as being complete was that an answer should be provided to each question, and it was not based on how extensive those answers were. Only five museums, out of the eight that received the questionnaire, sent back complete responses. Answers were provided to the following questions:

1. Please provide data on attendance before 2020 (for 2018 and 2019) and attendance in 2021 (attendance data for 2022 was compiled during telephone interviews conducted in February and March 2023).
2. What activities, or forms of activity, did the museum implement during the pandemic? How was contact built with the audiences that could not physically visit the institution (please also provide details on specific actions or events, with information on whether

they can be used in the text with the name of the specific event/action and also the name of the museum)?

3. Did the actions taken involve investment (in equipment, improving competences, etc.)?
4. Did you note any changes in social media outreach during the pandemic?
5. Did you track the attendance in online events? What volumes were they? If you did, please specify how.
6. Did viewers/audiences interact with you? Through what channels? Did you stimulate this communication? Do you have any typical examples of your audience's comments?
7. Have any activities from the pandemic become a part of the museum's standard operations after the pandemic?
8. Did the restrictions from the pandemic permanently affect the activities of your museum (e.g., abandoning audio guides, reducing the role of multimedia in the exhibition space, etc.)?
9. Have you noticed a change in the structure of visitor traffic, e.g., fewer visitors from abroad in favour of domestic visitors?
10. The tenth question did not directly relate to the topic under study as it covered the issue of accessibility of the museums for Ukrainian citizens fleeing to Poland, following Russia's armed attack on the country.

Their answers were supplemented with unstructured interviews, complementing the information that had been sent in, conducted in the period described above with six people working in different departments of the aforementioned museums (management, education, promotion, and marketing departments) and two in-depth interviews exclusively concerning the use of social media in museums.

In addition, an analysis of the content and intensity of social media use in nine national museums was conducted. The present article also makes use of publicly available reports and studies, as well as information materials primarily from the museums surveyed. The method of participant observation—involving the active use of the digital experience offer of museums during the pandemic that allied with systematic examination of its content—was also very important for the insights and conclusions contained herein. The primary objective of this approach was to achieve triangulation of the research conducted, minimising the risk of error, and achieving more reliable results.

It should be stressed that the results obtained from the interviews and questionnaires are interesting in that they not only provide quantitative data about the phenomenon (also obtained through the analysis of the content), but they also include comments from people working on the digital experience offer on a daily basis, showing their subjective feelings. They are therefore an authentic description of their relationship with their audience, allowing predictions to be carried out about the future of digital experiences in museums.

The decision to narrow down the survey to the largest Polish museums also has certain consequences. The group of organisations surveyed in this way makes it impossible to formulate conclusions that are representative of all Polish museums (which would also be very difficult to achieve since there are 939 museums in Poland, according to the Central Statistical Office). After initially identifying the topic of this study, it was decided to describe the activities of those museums that used the most diverse forms of activities during the pandemic, achieved the greatest reach through digital media, and, finally, enjoyed the greatest interest from audiences and visitors.

That was the first criterion for narrowing down the study on the analysis of social media use in the nine museums (presented in the Table 1 below). The second criterion was the separate set of questionnaire responses. Ostensibly, this article uses five case studies (in alphabetical order): National Museum in Gdansk, National Museum in Krakow, National Museum in Lublin, National Museum in Warsaw, and Wawel Royal Castle.

Table 1. Use of social media by the Polish national museums surveyed.

	Facebook Number of Followers/ Likes	Instagram Number of Followers/Number of Posts	YouTube Number of Subscribers/Number of Videos	TikTok Number of Followers/Total Number of Likes on Reels
National Museum in Gdansk	26,000/ 25,000	5457/ 601	499/ 125	Not used
National Museum in Kielce	8000/ 7400	2158/ 1168	407/ 192	Not used
National Museum in Krakow	103,000/ 101,000	30,300/ 1417	1890/ 249	Not used
National Museum in Lublin	23,000/ 22,000	4254/ 592	456/ 132	Not used
National Museum in Poznan	27,300/ 25,000	4336/ 200	1370/ 400	668/ 899
National Museum in Szczecin	10,000/ 10,000	2136/ 432	185/ 82	Not used
National Museum in Warsaw	110,200/ 103,800	73,400/ 1383	7620/ 857	27,300/ 402,500
Royal Castle in Warsaw	83,000/ 80,000	10,100/ 3575	5950/ 876	499/ 2593
Wawel Royal Castle	140,000/ 136,000	10,400/ 767	3180/ 192	Not used

The table reflects the status as of 30 April 2023.

4. Results

Audiences who had gradually lost the opportunity to visit museum galleries and see their favourite works over time began to vent their frustration by writing e-mails to the museums or—more often—by posting relevant comments on social media. The response to these statements was a competition announced by the National Museum in Warsaw at the end of February 2021: "From tomorrow, we will only be able to cover our noses and mouths with masks—we recommend masks decorated with paintings from the NMW, of course. To win one, all you have to do is answer one simple question: Which work from our collection do you miss the most, and why? For the authors of the most original, funniest or best-reasoned answers, we have 50 masks that have been prepared together with the museum's patron" [36]. The scale of the response came as a surprise to the museum staff, and the final result of the initiative was an outdoor campaign under the slogan "Art Soothes Longing", featuring reproductions of selected works from the museum's collection, accompanied by comments from visitors: "I've missed Olga Boznańska's *Granny's Nameday* because it's been a long time since I saw my grandparents" [statement by Krzysztof Kowalczuk-Fijałkowski]—Figure 1a; "To stand in front of Zak's *Pierrot*... and have nothing to do with everything going on around you, and smoking a pipe while doing fake poses... I miss that" [lena_robas]; "I often think of this work when I talk to my friends; they say we'll see more of it soon" [bartosz_w_panek]; "*Earth* by Ruszczyc... I miss the vast, mighty sky, like a view unobstructed by a mask" [Maria Muller]; "I've been sitting in an empty school for a few months now and I miss it. This picture is a dream of a school corridor at break time. We have only slightly fewer horses at our school" [filipinolippi]; "I've missed *Saint Anne of Faras*, both the one in the museum and the tiny copy that is in my family home, which I have not been able to visit for a year now due to the pandemic..." [Anna Filipek]—Figure 1b.

(**a**)

(**b**)

Figure 1. (**a**,**b**) Posters designed by the National Museum in Warsaw as part of the *Art Soothes Longing* campaign.

These statements not only speak of a longing for museums and their collections, but they also make us realise why we need art galleries, and why they are so important in the construction of our own identity and personality. They show that works of art not only build our aesthetic experience, but also help us to understand or more fully experience our relationship with the world and the people around us.

In view of the above, it is possible to conclude that the digital transformation of museums (or the cultural sector as a whole) was not merely a reaction to the restrictions introduced, or an efficient marketing exercise designed to sustain interest in those institutions, but it was actually much more significant: it was a socially relevant action aimed at sustaining the greatest possible impact of museums by building the well-being of the communities around museums. This context of the social relevance of museums is in line with the spirit of the narratives about these institutions that have been presented for some time, especially after the experience of the pandemic: "Another pivotal force defining a human-centred mindset for museum change is driven by new research and writing on empathy and human connection. These elements are integral to any vision of change for museums into places that feel alive with the spirit of connection" [37] (p. 5).

Polish museums have very quickly grown into this role, engaging in activities that build links among the museum community on one hand and, on the other, responding to the needs of audiences longing for direct contact with art departments. Of course, online formats became the basis for action. Their development necessitated investment in both the infrastructure and the team. In the case of the national museums, this was easy as the organiser offered support both in terms of investment in the necessary equipment and facilities, and also in developing new forms of communication. This made it possible, for example, to set up a recording studio at the National Museum in Warsaw, enabling the production and editing of audiovisual material at a level that meets the requirements of modern digital media, and to conduct streaming.

Investment in equipment, new technologies, and team training (increased activity in these areas was noted in all the museums surveyed, to a greater or lesser extent) was followed by a surge in social media users. This is best seen from the example of Facebook, which remains the channel with the largest reach for Polish museums. The Wawel Royal Castle's fan page has more than 140,000 followers today (April 2023), compared to around 12,000 in 2019. In December 2019, the National Museum in Warsaw had 68,000 followers on Facebook, compared to more than 110,000 today (April 2023), while the National Museum in Krakow had 62,950 followers in 2019 versus 103,000 in April 2023. At the same time, it is important to note that museums approach the use of social media in different ways, with

an uneven distribution of engagement in each of them. Such an approach does not seem entirely well thought out since it is well known that individual social media platforms reach different age groups.

In the museums surveyed, the activities undertaken can be divided into several types, but two general remarks should be made first. Firstly, most of the activities were carried out in an earlier period, and during the pandemic itself there were only efforts to adapt them as best as possible to allow interaction through the electronic media. Secondly, the museum teams realised very quickly that, in the context of the exponential growth of the digital materials being produced, it was necessary to structure this communication, and to stream it. It was also necessary to make these materials coherent, both in terms of the internal coherence of the materials being produced by a given museum, as well as finding a banner under which those materials could be published in order to distinguish them from those produced by the competition. At the National Museum in Warsaw, a hashtag slogan was introduced (#soonatNMW), and all content was labelled with a unique logo. Only one campaign was marked separately—#debtofgratitude—which aimed to draw attention to, and appreciate, the work of all those who were directly involved in helping those in need during the pandemic. A similar solution was adopted at the Wawel Royal Castle, where a unique hashtag was used to mark various types of action, e.g., #throughthekeyhole (the inner life of an apparently closed museum), #experttime, and #askacurator. Likewise, the National Museum in Lublin followed a similar path, introducing six permanent cycles with a daily post under the hashtag #discoveringchapelfrescos, concerning the most valuable monument on the museum's grounds—the Gothic chapel. The National Museum in Krakow introduced a 'Museum at Home' tab on its website, which contained all the digital activities that were available to viewers.

-   Seeking a digital equivalent to the traditional reception of artworks exhibited in the permanent galleries.

The permanent galleries bring together the most famous, and the most valuable, works of art in a museum's collection. For this reason, viewers of these exhibitions often return to them to see their favourite works. It seems natural in this situation that an attempt should be made to create a substitute for viewing these works. The National Museum in Krakow, for example, prepared two videos recording tours around the permanent galleries, which were made available on its YouTube channel as part of the prologue to the 30th Jewish Culture Festival in Krakow (the two videos received a total of 2172 views).

-   Creation of virtual temporary exhibitions, possibly scanning and making available real exhibitions that are closed due to restrictions.

Temporary exhibitions provide a unique opportunity to view works of art that are not normally available in a particular museum; usually, a large part of the changing exhibitions are works that are on loan from other museums. Among the most successful undertakings of this type during the pandemic was the exhibition, *Poland: The Power of Images,* which was prepared at the National Museum in Warsaw. This was one of those cases where the prepared exhibition never had an opening, and it was left waiting for visitors in closed museum rooms. This became the inspiration to scan the gallery space in 2D and 3D, and prepare a virtual tour through the exhibition, combined with a curator's commentary. This activity proved to be a great success as the digital version of the exhibition was eventually viewed by more than 70,000 people online. A unique activity in this area was a real-time guided tour of the *State of Affairs* exhibition at the same museum, which was streamed live on TikTok. It was viewed by over 6000 people and lasted more than three hours, as the viewers were able to ask a number of questions that the curators answered in real time (it should be noted that a group of 100 people is considered large for a traditional curator's tour).

-   Lectures, talks about the collection, meetings with curators and educators.

These types of activities are, in 'normal' times, a regular feature of the programme of every major museum (institutions with larger resources do not necessarily prepare such activities as part of their regular programme, but rather they stand out for their frequency and high level of technical preparation, such as presentations accompanying lectures. This technical prowess directly translates into the quality of their digital experience offer. Some types of activities continue to be implemented in a hybrid form after the pandemic, thus increasing the range of participation (e.g., lecture series related to the institution's collection).

- Classes and various activities designed for specific audiences (children, senior citizens, people with disabilities).

An interesting observation arising from the experience of the museums surveyed was the fact that there was an increase in the participation of two audience groups: senior citizens and people with disabilities. Whilst the number of children and young people participating in museum events decreased when it was not possible to visit museums together with a school class, it turned out that senior citizens and people with disabilities saw digitalisation of the message as a new opportunity, and they became recipients of content they had not previously used due to difficulties in accessing the facilities. Paradoxically, it proved more difficult to build relations in the digital world with the very group that was most familiar with it—young people. Accustomed to attractive messages on social media, they expected the same from museums, both in terms of the technical quality as well as the form and content. Solutions were sought to this problem, e.g., the National Museum in Gdansk published educational workshops for children on a daily basis in the form of tasks designed to activate the creative competences of young audiences.

- Audience activation activities using the collection (competitions, quizzes, etc.).

In practically every statement made by museum staff about the changing nature of their contact with audiences during the pandemic, it was emphasised that the main objective had become the activation of audiences on various levels—encouraging comments or inviting people to co-create content, e.g., by uploading their own photos. In several museums, it was common practice to organise various types of competitions and quizzes, or publish riddles for the public. The National Museum in Krakow, for example, announced a competition for a meme, using the museum's collection, that would best comment on the pandemic. The National Museum in Warsaw, in connection with the opening of its new platform CyfroweMNW [Digital NMW], announced a competition titled #CiętaSztuka [#SnippedArt], which involved the creation of collages, and alterations of works visible within the framework of free access. Meanwhile, by intentionally combining entertainment with learning, the Wawel Royal Castle published regular quizzes on Instagram stories, in addition to organising various competitions, including a photographic contest run jointly with Wikipedia called *Architectural Detail at Wawel*.

- Materials showing the hidden everyday life of a museum (e.g., conservation activities).

This type of content was very popular with audiences. The opportunity to get a sneak peek into the secret life of a museum (as with a theatre or other institution) always arouses curiosity. The National Museum in Krakow, for instance, had already been running the blog *Brzuch Muzeum [The Museum's Belly], or NMK from the inside*, since 2016. During the pandemic, a series of short films under the collective title *Invisible Wizards* was produced at the Wawel Royal Castle. Each one was devoted to a single object, covering both its history and the process by which it was restored to its former splendour by conservators who often had to solve crucial dilemmas and overcome various difficulties.

- Museum lessons (available offline as well as conducted in real time).

Museum lessons are one of the main activities of the formal education department in every museum. The pandemic completely ruled out the possibility of organising lessons as pupils could not physically attend the museums. Quite quickly, digital materials began to be created containing the content that had previously been covered in the lessons. The

real surprise, however, came with the lessons delivered online in real time. Not only did they once again make it possible to participate in live classes, but they also significantly increased the geographical reach of this type of activity. At the National Museum in Warsaw, the first surprise was the number of applications from schools in distant provinces, but an even bigger one was the growing interest in museum lessons from Polish schools virtually all over the world. It also turned out that this form of access to the native culture of communities living in the diaspora was attractive not only to children and young people, but to all members of the community. The scale of the online lessons conducted by museums is best shown by the figures for 2020 and 2021, where the number of participants was in the thousands. The Wawel Royal Castle organised 225 lessons for 4796 people, while the National Museum in Krakow held 317 lessons for 6460 people. The undisputed leader in this area, however, was the National Museum in Warsaw, which conducted 1908 online lessons that were attended by 47,700 people.

When analysing the data obtained from the museums surveyed, it is important to highlight two other aspects of the development of the digital experience offer—ones that were not related to the audiences, but rather to the teams of the individual museums.

The first was the gradual integration of the team through these activities, and the breaking down of the barriers separating the various departments. The need to record videos for YouTube or reels for use on Instagram or TikTok, or even the professional preparation of the streaming of an event, required the involvement and cooperation of a considerable number of people who previously may not have had the opportunity to work together so often.

The second aspect concerns the increased knowledge of the competitive environment. It is the norm that museums observe each other's activities, and relate them to their own reality. However, the pandemic shortened geographical distances, which meant, thanks to their digital content, that the activities of museums became even closer, including institutions from other continents. A good example of this was the campaign organised at the National Museum in Warsaw when viewers were encouraged to reproduce works of art, or motifs connected with them, at home. The picture combining Aleksander Gierymski's *Jewess with Oranges* with the motif of toilet paper, a commodity of particular interest to consumers in the first weeks of the pandemic, became famous nationwide. As the originators of this competition admit, they were inspired by a similar initiative at the Getty Museum in Los Angeles.

5. Discussion

In Polish museums, the pandemic resulted in a significant improvement in the digital competences of their teams, the technical equipment of the institutions, and the access to technologies necessary for the implementation of projects in the digital world. All this translated into substantial increases in both the number of users of the museum's social media and the recipients of their digital educational offer, and also the popularisation of the works of art and collections housed in the individual museums. An opinion has even been expressed that the pandemic actually contributed to a revolution in the field of museum education [38]. If we add to this the progressive digitalisation of museum collections (the current leaders in this area in Poland are principally the National Museum in Warsaw and the National Museum in Krakow), we must conclude that we are facing a radical change in terms of the ease of access to museum collections. This is significant not only with regard to the popularisation of cultural heritage, but also for its new interpretations. The continuing development of digital technologies is likely to bring about further transformations in this respect. Thus, it is not difficult to agree with Byungjin Choi and Junic Kim when they spoke of a new paradigm of the relationship between museums and users: "Today, with the application of digital technology advancements—virtual and augmented reality, robots, and artificial intelligence—and the increasing use of various Internet and smartphone-related services, museums are changing and becoming 'smart'. Digital technology, particularly, has enhanced, more than ever before, the existing potential value of museums' cultural heritage

and various contents beyond simple physical space and time constraints. Digitalisation improves the quality of the experience for visitors, makes museums accessible to more visitors, and promotes the use of the values and assets of museums in a wider variety of fields. In this respect, digitalisation is bringing about a new paradigm and an essential change in the relationship between museums and its users" [39].

Undoubtedly, changes in this area are taking place at various levels, and will continue to do so. During a study conducted at the National Museum in Warsaw, it was stated that there has been a re-evaluation of the digital channels used hitherto: "According to our observations, the pandemic caused a decline in the importance of websites in favour of social media. The representative business card and the first place to look for basic information, such as the museum's opening hours, have become profiles on various platforms, above all Facebook" [40].

With these statements in mind, it is worth observing and studying the audience's response to these changing conditions. It would seem, however, that while museum visitors are keen to use digital tools for information purposes, reaching out for promotional messages or ones that combine promotion with entertainment, they still prefer a real visit over virtual tours, digital images of works, or online encounters. During the pandemic, many people working in museums declared that digital communication channels would completely transform their institutions, and that after the pandemic, these new forms of cultural participation would remain on offer. However, it has turned out that, given a choice, audiences are no longer as keen to take advantage of the opportunities offered by the digital world, preferring the opportunity to visit galleries and exhibitions in person. The Education Department of the National Museum in Krakow conducted a survey of the museum's own audience in this regard, and the data obtained clearly showed that their audience strongly prefers direct contact with art. For this reason, in this museum (as in many others), online broadcasts of vernissages, lectures and workshops have been abandoned, while popular materials on the hidden life of the museum (e.g., the conservation of works of art) or videos devoted to temporary exhibitions have remained the standard. At the National Museum in Warsaw, a different solution was sought, and in the case of lectures, a hybrid model was applied whereby it is possible to actually attend a lecture which is also being simultaneously streamed online (the recording of the event remains later on Facebook, with one recent lecture having a total of over 1500 views). Online-only events have also been retained in its offer, such as the permanent series Matura SOS.

In discussing the changes that the pandemic brought about in museums, another point worth noting is the change in existing roles. Before the pandemic, the divide between external and internal stakeholders was sharp and indisputable. But there are now claims that the pandemic has changed this situation. The best-performing museums were those that saw their existing visitors as internal stakeholders, co-creators of digital content, who helped to model the flow of information online [41].

The question remains still open: how do we seek balance in the development of digital museums, and in the process of digitising museum collections? Making the collections available online undoubtedly minimises the carbon footprint as digital access to a museum tends to put less of a burden on the planet than an in-person visit to a gallery. There are also implications for access to cultural elements contained in the museums for vulnerable groups. However, the research presented in this article, and the conclusions drawn from it show that audiences primarily want real contact with works of art. This can hardly be considered a fad—after all, that is the essence of art as such. How can these different approaches be reconciled in the light of the concept of sustainability [42]? It could be said that, in the coming decade, museums will have to meet the challenge of "parallel development", creating a digital world alongside their traditional offerings. Here, however, further questions arise that are both substantive (what proportion should be maintained between these areas) and economic (where should the financial resources for these activities should be drawn from).

6. Conclusions

The evolution of cultural participation, including for museums, will continue to change. As of today, it can be said that no form of digital art reception can compete with a real visit to a gallery or an exhibition. This is proven by recent blockbuster museum exhibitions that have broken attendance records. An excellent example of this is the Vermeer exhibition at the Rijks Museum in Amsterdam (10 February–4 June 2023), which sold 500,000 tickets (according to the museum's website, tickets for the exhibition were completely sold out). In Poland, a highly popular exhibition was *Witkacy: Seismograph of the Acceleration Age* (8 July–9 October 2022), which was visited by more than 111,000 people.

Strategic decisions about the progress of digitalisation in museums must be influenced by public response. It will not affect the priorities for the digitalisation of museum objects: documentation and recording, building a knowledge base for scientific studies, or popularising images of works of art in different contexts (e.g., the production of merchandise or personalised souvenirs) [43–46]. However, there is a need to rethink the extent to which museums are digitalising their offers. As the data cited shows, a digital experience offer cannot compete with a real visit to a gallery. At the same time, however, it can facilitate access for people from groups at risk of social exclusion, and it is also often an opportunity for people who cannot visit a museum due to geographical distance to see a particular exhibition [47].

There is a risk that museums will limit the digitalisation of their offers for budgetary reasons. Already, for example, many Polish museums are not translating their digital content into sign language, even though this is required by the law on accessibility. Should there be a gradual move away from digitalisation, the argument may be the same: "Since it is used by relatively few people, we may as well abandon it. We will be able to put more money into real exhibitions".

Ultimately, the response of audiences has been unequivocal—a fact best shown by the attendance figures for Polish museums in the full post-pandemic year of 2022. The recorded numbers of total visits to exhibitions and galleries broke all records, in many cases far exceeding attendance levels before the outbreak of the pandemic: the Wawel Royal Castle recorded 1.791 million visits (2019: 1.588 million), the Royal Castle in Warsaw recorded 1.755 million (2019: 1.033 million), the National Museum in Warsaw recorded 1.62 million (2019: 1.172 million), and the National Museum in Krakow recorded 1.365 million (2019: 1.196 million).

In the museum world, these results were greeted with the simple comment: "They're back. Our audiences are back".

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References

1. Pasternak-Zabielska, M. *Raport z Badania Instytucje Kultury w Okresie COVID-19. Muzealne Strategie Docierania do Widzów*; Narodowy Instytut Muzealnictwa i Ochrony Zbiorów: Warszawa, Poland, 2021.
2. UNESCO. Report: Museum Around the World. In the Face of COVID-19. 2021. Available online: https://unesdoc.unesco.org/ark: /48223/pf0000376729_eng (accessed on 1 February 2022).
3. Moon, M. Retooling for the Revolution: Framing the Future of Museum Management after COVID-19. *J. Cult. Manag. Cult. Policy/Z. Für Kult. Kult.* **2020**, *6*, 193–220.
4. Watson, S. (Ed.) *Museums and Their Communities*; Routledge: London, UK, 2007.
5. Barańska, K. *Muzeum w Sieci Znaczeń. Zarządzanie z Perspektywy Nauk Humanistycznych*; Attyka: Kraków, Poland, 2013.
6. Aliakbar, J.; Taheri, B. Cultural Consumption, Interactive Sociality and the Museum. *J. Mark. Manag.* **2013**, *15–16*, 1729–1752.
7. Gustafsson, C.; Akram, I. Museums: An incubator for sustainable social development and environmental protection. *Int. J. Dev. Sustain.* **2016**, *5*, 446–462.
8. Ferilli, G.; Grossi, E.; Sacco, P.L.; Blessi, G.T. Museum environments, visitors' behaviour, and well-being: Beyond the conventional wisdom. *Mus. Manag. Curatorship* **2017**, *32*, 80–102.

9. Cole, J.B.; Lott, L.L. (Eds.) *Diversity, Equity, Accessibility, and Inclusion in Museum*; Rowman & Littlefield: Lanham, MD, USA; Boulder, CO, USA; New York, NY, USA; London, UK, 2019.

10. Catlin-Legutko, C.; Taylor, C. (Eds.) *The Inclusive Museum Leader*; Rowman & Littlefield: Lanham, MD, USA; Boulder, CO, USA; New York, NY, USA; London, UK, 2021.

11. Vulpe, M. Collections management action support system—CMASS. *Int. J. Mus. Manag. Curatorship* **1986**, *5*, 349–356.

12. Keen, S. *Fragments of the World: Uses of Museum Collections*; Routledge: London, UK; New York, NY, USA, 2005.

13. Litchfield, R.; Gilson, L. Curating Collections of Ideas: Museum as Metaphor in the Management of Creativity. *Ind. Mark. Manag.* **2013**, *42*, 106–112. [CrossRef]

14. Silverman Lois, H. Visitor Meaning-Making in Museums for a New Age. *Curator Mus. J.* **1995**, *38*, 161–170. [CrossRef]

15. Hanquinet, L. Visitors to Modern and Contemporary Art Museums: Towards a New Sociology of "Cultural Profiles". *Sociol. Rev.* **2013**, *61*, 790–813.

16. Rodney, S. *The Personalization of the Museum Visit. Art Museums, Discourse, and Visitors*; Routledge: London, UK, 2019.

17. Mason, D.; McCarthy, C. Museums and the Culture of New Media: An Empirical Model of New Zealand Museum Websites. *Mus. Manag. Curatorship* **2008**, *23*, 63–80. [CrossRef]

18. Parry, R. (Ed.) *Museums in a Digital Age*; Routledge: London, UK, 2010.

19. Proctor, N. Digital: Museum as Platform, Curator as Champion, in the Age of Social Media. *Curator Mus. J.* **2010**, *53*, 35–43.

20. Maracos, P. Museums and Social Media: Modern Methods of Reaching a Wider Audience. *Mediterr. Archaeol. Archaeom.* **2014**, *14*, 75–81.

21. Mihelj, S. Culture Is Digital: Cultural Participation, Diversity and the Digital Divide. *New Media Soc.* **2019**, *21*, 1465–1485.

22. Jung, Y. *Transforming Museum Management. Evidence-Based Change Trough Open System Theory*; Routledge: London, UK, 2022.

23. Black, G. *Tansforming Museums in the Twenty-First Century*; Routledge: London, UK, 2012.

24. Golding, V.; Modest, W. (Eds.) *Museums and Communities. Curators, Collections and Collaboriation*; Bloomsbury: London, UK, 2013.

25. Lord Gail, D.; Lord, B. *The Manual of Museum Management*; AltaMira Press: Lanham, MD, USA, 2009.

26. Simon, N. *The Participatory Museum*; Santa Cruz Museum: Santa Cruz, CA, USA, 2010.

27. Piontek, A. *Museum und Partizipation. Theorie und Praxis Kooperativer Ausstellungsprojekte und Beteiligungsangebote*; Transcript Verlag: Bielefeld, Germany, 2017.

28. Kaitavuori, K. *From Accessibility to Participation–Museum as a Public Space, In Making Cultural Heritage Truly Common (Conference Publication)*; Finnish National Gallery: Helsinki, Finland, 2008.

29. Nowacki, M.; Kruczek, Z. Experience Marketing at Polish Museums and Visitor Attractions: The Co-Creation of Visitor Experiences, Emotions and Satisfaction. *Mus. Manag. Curatorship* **2021**, *36*, 62–81.

30. Ambrose, T.; Paine, C. *Museum Basics. The International Handbook*; Routledge: New York, NY, USA, 2018.

31. Falk John, H. *The Value of Museums. Enhancing Societal Well-Being*; Rowman & Littlefield: New York, NY, USA; London, UK, 2022.

32. Tula, G.; Bowen Jonathan, P. (Eds.) *Museums and Digital Culture. New Perspectives and Research*; Springer: Berlin/Heidelberg, Germany, 2019.

33. Klinowski, M.; Szafranowicz, K. Digitisation and Sharing of Collections: Museum Practices and Copyright During the COVID-19 Pandemic. *Int. J. Semiot. Law-Rev. int. Sémiot. jurid.* **2023**, 1–29. [CrossRef]

34. Bokolo, A., Jr.; Petersen, A.S. Examining the digitalisation of virtual enterprises amidst the COVID-19 pandemic: A systematic and meta-analysis. *Enterp. Inf. Syst.* **2020**, *15*, 1–34.

35. Bokolo, A., Jr. Managing digital transformation of smart cities through enterprise architecture—A review and research agenda. *Enterp. Inf. Syst.* **2021**, *15*, 299–331.

36. Muzeum Narodowe w Warszawie. Available online: https://www.facebook.com/MuzeumNarodowe/posts/pfbid0rw9 mRXqkbVEprHZb9xe8H7SzfxffwsmERdDKTDH3mNxikLhu1YfEVDBXWutB4i8Vl (accessed on 3 October 2022).

37. Murawski, M. *Museum as Agents of Change. A Guide to Becoming a Changemaker*; Rowman & Littlefield: Lanham, MD, USA; Boulder, CO, USA; New York, NY, USA; London, UK, 2021.

38. Górajec, P. (R)evolution of Museum Education during the COVID-19 Pandemic. *Muzealnictwo* **2021**, *62*, 267–272.

39. Byungjin, C.; Junic, K. Changes and Challenges in Museum Management after the COVID-19 Pandemic. *J. Open Innov. Technol. Mark. Complex.* **2021**, *7*, 148. [CrossRef]

40. Statement by a Person Working at the National Museum in Warsaw. Interview conducted in April 2023 face-to-face interview, conducted at the National Museum in Warsaw.

41. Labadi, S. *Rethinking Heritage for Sustainable Development*; UCL Press: London, UK, 2022.

42. Schweibenz, W. *The Virtual Museum: New Perspectives for Museums to Present Objects and Information Using the Internet as a Knowledge Base and Communication System, Knowledge Management und Kommunikationssysteme, Workflow Management, Multimedia, Knowledge Transfer*; Zimmermann, H.H., Volker, S., Eds.; UVK Universitätsverlag Konstanz: Konstanz, Germany, 1998; pp. 185–200.

43. Styliaras, G.; Koukopoulos, D.; Lazarinis, F. *Handbook of Research on Technologies and Cultural Heritage: Applications and Environments, Information Science Reference*; IGI Global: Hershey, PA, USA, 2011.

44. Pruulmann Vengerfeldt, P.; Aljas, A. *Digital Cultural Heritage–Challenging Museums, Democratising the Museum: Reflections on Participatory Technologies*; Pille, P.-V., Agnes, A., Eds.; Pl Academic Research: Frankfurt Am Main, Germany, 2014; pp. 163–184.

45. Laine-Zamoyska, M. Digitalizacja w fińskim muzealnictwie. *Muzelnictwo* **2012**, *53*, 124–129.

46.   Pawłowska, A.; Matoga, Ł. Wirtualne Muzea w Internecie–forma promocji i udostępniania dziedzictwa kulturowego czy nowy walor turystyczny? *Tur. Kult.* **2014**, *9*, 46–58.

47.   Gonzalez-Herrera, A.I.; Diaz-Herrera, A.B.; Hernandez-Dionis, P.; Perez-Jorge, D. Educational and accessible museums and cultural spaces. *Humanit. Soc. Sci. Commun.* **2023**, *10*, 67. [CrossRef]