

The impact of the COVID-19 pandemic on creative industries, cultural institutions, education and research



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1. INTRODUCTION

1.1. THE REPORT

This report has been commissioned by the World Intellectual Property Organization, with the objective of presenting the impact of the COVID-19 pandemic on cultural and creative industries, education and research, identifying their initiatives and challenges in facing the pandemic, and consequently, the main trends and trajectories that emerged.

This brief study has been supported by an extensive team of experts worldwide (see Appendix 1). Whilst attempts have been made to be comprehensive both in terms of geographical coverage and sectors, some limitations are evident: language barriers as some relevant information was available only in the national languages; no standard accounting of the phenomena across countries and continents, sometimes even in the same country because of the specific administrative nature of the country (federal system); lack of global statistics on creative industries. On top of all these elements, the time differentiated spread of the pandemic, characterized by different lockdowns with diversified duration and intensity, impacted the creative activities and creators in different ways depending on the location. This made it challenging to identify reliable and coherent quantitative data that is comparable worldwide. According to the desk research, the case studies collected from the different WIPO Member States and the interviews with experts specialized in different creative sectors and representing different geographical areas, we are in a position to observe only some general trends and impacts. Finally, as a general note for this report, it might be too soon to assess the short- and long-term impacts.

The report is structured as follows. Part I relates to the creators and the creative industries. Part II relates to educational, research and cultural heritage institutions.

The next section presents the overall context for the study in terms of the COVID-19 pandemic itself, and the reactions and the general trends that can be identified in the educational, research and cultural heritage institutions.

In Part I, Chapter 1 outlines the state of the art of a number of different sectors: audiovisual, music, publishing and visual arts, respectively. In each sub-section, a detailed overview is provided regarding the impact COVID-19 had on the sector and showing examples of practices that emerged. These different practices will be discussed with the support of some case studies (presented in the Appendix 2), selected according two principles: the geographical and sectorial coverage and the relevance in terms of best practices.

In Part II, Chapter 1 outlines the state of the art of a number of institutions of different sectors: museums, libraries and archives, and educational and research institutions, respectively. In each sub-section, a detailed overview is provided regarding the impact COVID-19 had on the sector and showing examples of good practices that emerged. These good practices are discussed with the support of some case studies (presented in the Appendix 2), selected according to two principles: the geographical and sectorial coverage and the relevance in terms of different examples of measures.

Part III will conclude by providing the highlights and lessons learned from the research and the case studies analyzed. The report includes different appendices as complement of the study (list of experts, case studies and bibliography). The report includes different appendices as complement of the study (list of experts, case studies and bibliography).

1.2. THE CONTEXT

The COVID-19 pandemic is one of the most substantial recent challenges facing business and governments this century. It has generated health concerns as well as an unprecedented social and economic crisis which has particularly hit service industries hard and induced an acceleration of digitalization practices. The COVID-19 pandemic is very different from other forms of crisis (e.g., financial, political) because it has had a significant overall impact on all business models, organizations, creative workers and users. It is a health crisis which specifically impacts both the outdoor and indoor leisure industry. This pandemic is characterized by some specific aspects: first, its non-linear character contra the one assumed by traditional crisis lifecycle models, as it may flare up again in intensity following a first wave and ebb as has been predicted by medical experts. Second, far from being an imminent or emerging crisis, it is a sustained crisis as it can last for months or years, over a very long crisis existence phase and also being cyclical crisis as well because of the different contagious waves.

All the restrictions and measures taken to reduce human contact and movement to slow down the spread of the virus together with relevant challenges represent a discontinuity, breaking from the past reality. From a management perspective, COVID-19 represents **a huge strategic challenge** as it disrupts the mechanisms of demand and supply, and production capacity, contributes to increased uncertainty as well as financial instability leading to unpredictable scenarios, unforeseeable in a pre-crisis time. If on one hand, COVID-19 disrupted the market and business ecosystems we traditionally know, on the other, it has accelerated innovation, introducing the so-called "**imposed service innovation**". Particularly of interest from the innovation management perspective is that this acceleration of innovation happened not because organizations wanted to innovate, but because they had to limit the negative implications brought about by the pandemic. Moreover, this specific crisis created a change of mindset and stimulated **business opportunities** that would have never been considered under normal circumstances. Furthermore, the study of this 'imposed service innovation' is relevant as we experience a shift from a pandemic to an endemic disease and more and more often, we will be faced with this kind of phenomena in the future.

During a crisis, two types of strategy are mainly adopted: reactive or proactive strategies. Specifically, in this study we observed that all strategies developed are reactive. So far, no creative industries or creators were able to implement a pro-active strategy as the magnitude/impact of this pandemic was clearly unknowable. From the material collected, an identified general trend included the partial or total closure of live activities, with a shift to online – when online/home working was possible for creative workers, creators and users. This has implied a collapse of employment in the creative sector (specifically for free-lancers and self-employed). Some creative sectors showed more adaptability to highly volatile business environments, applying digital technology adoption strategies. The digital maturity of institutions played a key role in facing the challenges implied by the pandemic.

The intensity as well as the dynamics of the impact vary significantly across creative subsectors and countries¹. This study reveals positive implications of the COVID-19 pandemic within the creative industries (e.g., IT and audiovisual)² as well as the negative ones

¹OECD 'Culture shock: COVID-19 and the cultural and creative sectors', 2020, Available at: https://read.oecd-ilibrary.org/view/?ref=135 135961-nenh9f2w7a&title=Cul%20ture-shock-COVID-19-and-the-cultural-and-creative-sectors, Florida, R., and Seman, M., 'Lost Art: Measuring COVID-19's devastating impact on America's creative economy' Brookings Institution, 2020, Available at: https://www.brookings.edu/wp-content/uploads/2020/08/20200810 brookingsmetro covid19-and-creative-economy final.pdf.

² Kim, S., et al., 'The COVID-19 Crisis Management in the Republic of Korea' International Case Studies in the Management of Disasters, 2020, Available at: https://www.researchgate.net/publication/343555107 The COVID-19 Crisis Management in the Republic of Korea.

experienced by libraries, museums and all live events organized by these institutions as it happened for all events and activities related to entertainment industries³. **Technology made** the resources available to a higher number of consumers, lowering the entrance barriers of the sector concerned. The pandemic produced a disruption in the consumption habits of all population segments as they could not attend the venues physically. Those with lower virtual literacy were penalized, usually old people or very young children/pupils -having a lower virtual literacy were more penalized. Even with the online availability of research material, in some countries researchers did not have strong internet connections to download data or they could access only the abstracts and not the full articles. Lack of **E-resources both in research and in teaching made regular online activities very difficult**. This impact was particularly high in less-developed areas of the globe.

Worldwide, different governmental and private support measures were introduced to mitigate the effects on cultural institutions.⁴ Some museums from different countries could benefit from financial support during the pandemic, such as emergency funds, compensation for losses, emergency tax policy, coverage of employee salaries, or suspension of rents/mortgages.

[Part I follows]

Library Consortia and Their Sustainability' Journal of Library Administration, 2020, Available at: https://www.tandfonline.com/doi/full/10.1080/01930826.2020.1760558.

³ Agostino, D., et al., 'Italian state museums during the COVID-19 crisis: from onsite closure to online openness' Museum Management and Curatorship, 2020, Available at: https://www.tandfonline.com/doi/full/10.1080/09647775.2020.1790029, Machovec, G., 'Pandemic Impacts on

⁴ Several examples and best practices are available on the WIPO platform, https://www.wipo.int/meetings/en/2022/info-session-impact-covid-19-copyright-ecosystems.html.

PART I: CREATORS AND THE CREATIVE INDUSTRIES

In this chapter we will provide an overview of the main trends and impacts identified per sector, based on the situation created by the COVID-19 pandemic. Additionally, a description of the types of measures taken to address the impacts is provided. Four sub-sectors of the cultural and creative sectors are covered in this section: audiovisual sector, music sector, publishing and visual arts.

1. AUDIOVISUAL SECTOR

The COVID-19 pandemic had mixed effects on various segments of the audiovisual sector, such as film (including production and distribution), broadcasting (television and radio), and video and multimedia industries, including various on-demand services (such as Video on Demand- 'VOD', Catch-up TV).⁵ The impact on different sector segments depends on how much activities within them have been affected by isolation provisions and how quickly the activities have been resumed. The advertising and film segments have been most significantly affected by the pandemic.⁶

As observed, the lockdown measures due to the COVID-19 pandemic had a **key impact on the functioning of cultural and creative markets and the global flows of digital cultural content**. From the outbreak of the COVID-19 pandemic, global online platforms (Netflix, Amazon Prime Video, Disney Plus, Apple TV Plus, or HBO Max) strengthened their position, which generated an unprecedented change in the production, dissemination, and consumption of audiovisual content. This led to the rise of the platform as the dominant infrastructural and economic model in the industry. The present pandemic context could back concentration dynamics in the audiovisual market due to the action of global streaming platforms.

However, the **impacts of COVID-19 on the audiovisual sector around the world may differ in mature and developing markets**. Developing markets (such as the African continent) face different challenges than mature markets (with respect to the formalization of the industry, digital revolution, and liberalization of the audiovisual sector). Such challenges relate to the lack of traditional infrastructure, as well as the lack of enabling policies including for the acquisition, management and use of intellectual property rights. In the context of digital transformation, lack of harmonizing legislation on intellectual property, technology, and insufficient data privacy protection regimes are currently barriers to Africa's digital potential.

⁵ Debande, O., and Chetrit, G., 'The European Audiovisual Industry: An overview' European Investment Bank, 2001, Available at: https://www.eib.org/attachments/pj/pjaudio_en.pdf.

⁶ Yaquinta, M., et al., 'The Impact of Covid-19 Pandemic on the audiovisual and live entertainment sectors in the Americas: A study in eight countries' The International Federation of Actors (FIA), 2021, Available at: https://fia-actors.com/fileadmin/user-upload/News/Documents/2021/January/Informe-Final-EN-v2.pdf.

⁷ Vlassis, A., 'Global online platforms, COVID-19, and culture: The global pandemic, an accelerator towards which direction?' Media Culture and Society, 2021, Available at: https://journals.sagepub.com/doi/full/10.1177/0163443721994537.

Intergovernmental Committee for the Protection and Promotion of the Diversity of Cultural Expressions 'Preliminary analytical report on the impact of the COVID-19 pandemic on the cultural and creative industries, and the findings of the ResiliArt movement', 2021, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000375307. United Nations Educational, Scientific and Cultural Organization (UNESCO) 'The African film Industry: trends, challenges and opportunities for growth', 2021, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000379165.

¹⁰ Kevin, D. and Ali S. 'Feasibility Study on Enhancing the Collection of Economic Data on the Audiovisual Sector in a Number of African Countries' WIPO, 2018, Available at: https://www.wipo.int/meetings/en/doc_details.jsp?doc_id=402357

Copyright and piracy concerns also remain a prominent issue, and two-thirds of countries estimate that at least 50% of the potential revenue of the sector is lost to the illegal exploitation of creative audiovisual content.¹¹

In the context of the digital revolution, accessibility of technology and the new ability to distribute but also monetize content directly to consumers via online platforms is giving rise to a new economy for African content creators. For example, a recent report suggests that **the pandemic accelerated the digital revolution, as a significant driver of development and growth**. Firstly, the pandemic and its related lockdowns forced many to turn to their devices to learn, create and consume from home. For example, in Nigeria, the COVID-19 lockdown positively impacted the growth of digital platforms. One such platform recently declared that its subscribers in Africa have grown to over 2 million, with Nigeria being a significant market. Furthermore, another social media platform recently allowed monetization of the content of African freelance producers, which substantially increased creative and revenue possibilities, especially for young producers who can bypass traditional gatekeepers.

Although the COVID-19 pandemic might have had some positive impacts especially in developing markets, it must be stressed that such markets were not immune to the pandemic. Irrespective of the location, the COVID-19 pandemic led to a loss of revenues, jobs and livelihoods and revealed systematic problems in the audiovisual market. Such effects can be particularly measured in more mature markets such as Europe or North America, with more data available on the impacts of the pandemic. For example, the European Audiovisual Observatory report suggests that the pandemic led to a drop of 10% of the revenues of the audiovisual sector. Regarding the advertising segment, even though the pandemic led to an increase in audiences, TV advertising revenues of the sector dropped by 15 to 20% due to the general reduction of the economic welfare of the audiences. Furthermore, advertisers facing market instability preferred short-term gains and internet advertising rather than customer base building, customary for TV advertising. Combined with reduced public funding, which together with customer subscriptions to pay services and box offices constitute the primary source of financing for the sector, the pandemic might create long-term financial struggles.¹⁴

The pandemic and lockdowns put production and distribution on halt and reduced box-office revenues by half. Furthermore, the production of high-end content (such as movies) had to be cancelled or postponed. Although by October 2020 89% of films promoted on pay-per-view VOD had already had a cinema release, with massive closure of cinemas in the following months, movies were increasingly being directly released on online platforms, which meant disruption of this traditional business model.¹⁵

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

¹⁴ Blázquez, F., et al., 'The European audiovisual industry in the time of COVID-19' European Audiovisual Observatory, 2020, Available at: https://rm.coe.int/iris-plus-2020-2-the-european-audiovisual-industry-in-the-time-of-covi/16809f9a46%20-%20Europe%20-%202020.

¹⁵ Blázquez, F., et al., 'The European audiovisual industry in the time of COVID-19' European Audiovisual Observatory, 2020, Available at: https://rm.coe.int/iris-plus-2020-2-the-european-audiovisual-industry-in-the-time-of-covi/16809f9a46%20-%20Europe%20-%202020,

Blazquez, F., et al., 'Yearbook 2020/2021, Key trends: Television, Cinema, Video and on-demand audiovisual services, the Pan-European Picture' European Audiovisual Observatory, 2021, Available at: https://rm.coe.int/yearbook-key-trends-2020-2021-en/1680a26056,

Vlassis, A., 'Global online platforms, COVID-19, and culture: The global pandemic, an accelerator towards which direction?' Media Culture and Society, 2021, Available at: https://journals.sagepub.com/doi/full/10.1177/0163443721994537,

Intergovernmental Committee for the Protection and Promotion of the Diversity of Cultural Expressions 'Preliminary analytical report on the impact of the COVID-19 pandemic on the cultural and creative industries, and the findings of the ResiliArt movement', 2021, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000375307.

When focusing on booming Asian audiovisual markets such as China and India, it appears that the pandemic disrupted the growth potential of the sector. Similarly, in European and American audiovisual sectors, measures tailored to contain the spread of pandemic hit harshly, especially in the film, advertisement and entertainment segments of the industry. For instance, in China, according to the Hong Kong Theatres Association, box office takings for the three months February-April in 2020 were down by 80% compared with the same period in 2019. Another source reports that over 6,000 film-related companies are going out of business and more than 1,000 cinemas will close permanently across the country. The situation is accelerated because China's audio-visual sector holds the biggest consumer base and globally generates the most revenue from the home box office's collection. It is not only an attractive market for foreign investment but also a potentially thriving and economically viable sector of the domestic economy.

Digital platforms, which experienced a new wave of expansion due to the pandemic, contributed to the sectors' growth. Specifically, this could be done by accommodating endusers and disrupted physical audiovisual production chains, and by significantly reducing the costs relating to dissemination, screening, and the ultimate consumption of the content and product.¹⁹

The audiovisual sector experienced disruption of production of new original and local features, an increase in the level of unemployment, and negative effects in terms of generation of the economic activity which subsequently affected investor sentiments, the stock markets and the returns of the film and drama industry. Similar impacts can also be observed at the national level in India, which proudly hosts the biggest film industry in terms of pictures produced in a year. While the pandemic shuttered physical segments of the sector, India's streaming market is expected to grow by 31% from 2019 to 2024.²⁰ Whether we are looking at Europe, the Americas or Asia, the long-term effects of the pandemic on the development of the industry remain unclear and will mostly likely depend on policy measures to address the new normal situation in audiovisual markets. What is certain is that effects of the pandemic will not disappear with mere resumption of physical production activities.²¹

The COVID-19 pandemic also revealed structural problems in the sector, and some authors suggest that it may lead to a systematic crisis.²² For example, in Europe, the sector was in a fragile state long before the pandemic started. According to the European Audiovisual Observatory (EAO) report, pre-pandemic data (from 2014-2019) shows that the sector has experienced a declining market for most of its segments. The annual growth rate accounted for only 0.2% in real terms. The on-demand market has been the major driving force of the sector. This is also supported by an EAO report from 2021 which emphasizes that

¹⁶ Shackleton 'Lights, Camera, Inaction: Hong Kong and China Film Industry in Lockdown' HKTDC, 2020, Available at: https://research.hktdc.com/en/article/NDI5NjcxNjA5

¹⁷ Mughal 'COVID-19's impact on the arts sector in China' British Council, 2020, Available at: https://www.britishcouncil.org/research-policy-insight/insight-articles/impact-covid-19-arts-sector-china

¹⁸ Hu and Ye 'How COVID19 pandemic affect film and drama industry in China: an evidence of nonlinear empirical analysis' Economic Research-Ekonomska Istraživanja, 2021, Available at: https://doi.org/10.1080/1331677X.2021.1937262

¹⁹ Ibid.

²⁰ Krishnan 'Covid-19 crisis hits India's booming Film industry hard' Radio France international, 2021, Available at: https://www.rfi.fr/en/culture/20210801-covid-19-crisis-hits-india-s-booming-film-industry-hard-bollywood-culture-television-economy

²¹ Federation of European Screen Directors 'Film and Audiovisual Sector COVID-19 Statement by over 115 organisations', FERA, 2020, Available at: https://screendirectors.eu/joint-film-and-audiovisual-sector-covid-19-statement-7-april-2020/

Hu and Ye [n 15], Krishnan [n 17]

²² Blázquez, F., et al., 'The European audiovisual industry in the time of COVID-19' European Audiovisual Observatory, 2020, Available at: https://rm.coe.int/iris-plus-2020-2-the-european-audiovisual-industry-in-the-time-of-covi/16809f9a46%20-%20Europe%20-%202020.

subscription VOD (SVOD) services alone accounted for over 75% of the incremental revenues in 2016-2020. Legacy audiovisual services (pay TV) have resisted comparatively well due to the completed digitization process and convergence strategies with internet services. Home entertainment continued to grow due to the growing market for digital services; however, other market segments have been flat or in decline. Lockdowns have also incentivized many Europeans to experiment with SVOD or to stack subscriptions and turn away from traditional audiovisual business models to SVOD services (so-called cord-cutting).²³

A report by the EAO suggested that **systematic crisis will particularly occur in cinemas and independent art films, which are unlikely to recover from the crisis**. ²⁴ It is expected that cinemas will focus more on the exploitation of European and US 'blockbuster' films and that European art-house film will increasingly rely on funding from the significant SVOD platforms. If internet advertising recovers faster than TV advertising, there is a risk of substantial loss of revenues which can consequently further hurt European production. To mitigate this resource shortage, broadcasters may opt to invest more in TV series and less in high-end output. Also, the role of media service providers in the production of high-end content may be impacted by post-COVID-19 austerity measures. More consumers prefer SVOD subscriptions due to the crisis, and fewer pay-tv subscriptions could result in consumers spending less for subscription services and an overall decline in resources available in the sector. This could endanger the volume and diversity of high-end European programs (film and TV series), as SVOD-funded programs and revenue streaming from online subscriptions would probably not compensate for the decrease in investments by legacy players and lack of physical distribution and exhibition options. ²⁵

On the other hand, some authors advocate that the so-called "platformization" trend, which intensified due to the pandemic so that major platforms providing subscription on-demand substantially grew in the first six months, positively affected regional cooperation and original production. Such platforms partner with regional and national pay-tv operators to widen customer access. They also adopt public diplomacy strategies to promote the reputations of global online platforms, by enforcing positive opinions to public regulators, screen industry bodies, and culture professionals. In the context of the pandemic, such a strategy encouraged the establishment of private funds from which many affected by the pandemic benefited but also incentivized original production and initiated a new wave of media regionalization.

The "platformization" trend represents a segment of a larger tendency that impacted audiovisual markets globally. COVID-19 has massively accelerated the demand for

future', ECLAC, 2022, Available at: https://www.cepal.org/sites/default/files/publication/files/46817/S2000960 en.pdf.

²³ Blazquez, F., et al., 'Yearbook 2020/2021, Key trends: Television, Cinema, Video and on-demand audiovisual services, the Pan-European Picture' European Audiovisual Observatory, 2021, Available at: https://rm.coe.int/yearbook-key-trends-2020-2021-en/1680a26056.

²⁴ Blázquez, F., et al., 'The European audiovisual industry in the time of COVID-19' European Audiovisual Observatory, 2020, Available at: https://rm.coe.int/iris-plus-2020-2-the-european-audiovisual-industry-in-the-time-of-covi/16809f9a46%20-%20Europe%20-%202020, Intergovernmental Committee for the Protection and Promotion of the Diversity of Cultural Expressions 'Preliminary analytical report on the impact of the COVID-19 pandemic on the cultural and creative industries, and the findings of the ResiliArt movement', 2021, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000375307.

²⁵ Lhermitte, M., et al., 'Rebuilding Europe, the cultural and creative economy before and after the COVID-19 crisis' Ernst & Young, 2021, Available at: https://www.rebuilding-europe.eu/ files/ugd/4b2ba2 1ca8a0803d8b4ced9d2b683db60c18ae.pdf.

²⁶ Vlassis, A., 'Global online platforms, COVID-19, and culture: The global pandemic, an accelerator towards which direction?' Media Culture and Society, 2021, Available at: https://journals.sagepub.com/doi/full/10.1177/0163443721994537, Rovira et al. 'Digital Technologies for a new

²⁷ Vlassis, A., 'Global online platforms, COVID-19, and culture: The global pandemic, an accelerator towards which direction?' Media Culture and Society, 2021, Available at: https://journals.sagepub.com/doi/full/10.1177/0163443721994537. Error! Hyperlink reference not valid.

audiovisual over-the-top (OTT) services worldwide. OTT services refer in the context of the audiovisual market to the distribution of content dependent on the internet rather than upon conventional channels such as over the air TV, cable television, or direct to home satellite. Lockdowns, an increase in the product range and variety, the promotion of localized content and increased household connection to fixed, high-quality broadband led to the growth of OTT subscriptions by 26% in 2021compared to the year before. The OTT business model is slowly becoming dominant in terms of growth and will most likely be the future frontrunner in the audiovisual sector. The entrance of OTT services into households was accompanied by cord-cutting, which refers to viewers cancelling their subscriptions to conventional audiovisual services (multichannel TV, cable satellite). Furthermore, the data from 2021 suggests that streaming consumption remained higher than before the pandemic, which indicates that the pandemic induced shift will likely remain the new normal.²⁸

Latin America has been the region most affected economically by the pandemic, with a contraction of 7% in GDP for 2020²⁹. There, the cord-cutting trend has been even more prominent. Consumers faced with financial instability preferred "all in one" platforms offering greater content variety and comfort. Content variety remains the decisive feature for consumers, and content localization (production in local languages using local infrastructure) is a crucial competitive imperative for global platforms.³⁰

Regarding the structural changes and social impacts, in the United States **the pandemic showcased the fragmented nature of the types of workers** that make up the sector while some stakeholders point out to historical problem linked to the logic of project-based labor insertion, widely predominant in audiovisual production, film and live entertainment.³¹ This is also supported by reported **falls in the level of employment in the sector**, which is higher than those of the economy as a whole, because the sector showcases a higher percentage of informal contracts (such as self-employed, temporary or casual employment). With the significant suspension of activities in the audiovisual sector, the workers in the industry had greater exposure to unemployment and could not rely on social security, paid leave, health care and aid funds. For example, according to a study conducted by the Metropolitan University for Education and Work (UMET) and the International Federation of Actors (FIA), the COVID-19 pandemic in Argentina caused a 58.2% decline in employment in the sector year-on-year during the same period. (20.9% fall in general terms of total employment).

Many national authorities took the initiative to provide relief also for informal and self-employed workers. For example, Slovenia implemented temporary tax, social and economic measures shortly after the pandemic outbreak to support organizations and individuals in cultural and creative sectors. Such efforts were also targeted at the self-employed in the audiovisual sector. For instance, those individuals received financial assistance (payment of basic monthly income of € 350 for March and € 700 each for April and May), an exemption from social security contributions in April and May in 2020), exemption from health and pension insurance contributions, advanced payments of personal income tax, right to have their social contributions temporarily covered by the state or reimbursement of wages to workers who were temporarily unable to provide work. ³² The Moroccan Film Center (CCM) allocated MAD 1

²⁸ Ibid.

²⁹ https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD

³⁰ Yaquinta, M., et al., 'The Impact of Covid-19 Pandemic on the audiovisual and live entertainment sectors in the Americas: A study in eight countries' The International Federation of Actors (FIA), 2021, Available at: https://fia-actors.com/fileadmin/user_upload/News/Documents/2021/January/Informe_Final_EN_-_v2.pdf.

³¹ Ibid

³² Contribution of Ministry of Economic Development and Technology - Slovenian Intellectual Property Office 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/ministry-of-economic-development-and-technology-slovenian-intellectual-property-office.pdf.

million to a COVID Emergency Fund for the audiovisual sector, and the Cultural Strategy, Planning and Assessment Bureau in the Portuguese Ministry of Culture allocated, in their Economic and Social Stabilization Program, an amount of €34,3 million to be distributed among different support lines including for Cinema and Audiovisual to mitigate the losses of entities and professionals who are contracted with the ICA (Cinema and Audiovisual Institute).³³.

Unfortunately, the relief sought and needed by creators was many times greater than what governments could provide. The pandemic underlined the role of collective management organizations (CMOs), which according to the survey conducted by the Society of Audiovisual Authors (SAA), created a safety net for many creators through mobilization of resources.³⁴ 25 CMOs from 18 countries used their regular social funds, established emergency funds, or jointly with public authorities helped audiovisual authors. CMOs not only provided substantial financial support from which more than €5 million went to audiovisual authors;³⁵ more importantly, they supported authors with fast-track distributions of royalties, advance payments and advocacy activities. SAA however notes that "collective management organizations' social funds cannot be the only lifeline of audiovisual authors" and calls for long-term sustainable solutions to support actors particularly in the audiovisual sector, who will face the aftermath of crisis in upcoming years.

Another study by the SAA³⁶ highlighted that even if many activities could have been resumed after a few months of the pandemic, **the pandemic deepened the strategies of international delocalization of filming and remote work in post-production tasks**. It also affected different parts of the workforce differently, as remote work in some segments of the audiovisual sector requires extra resources (such as equipment), skills and time.

2. MUSIC SECTOR

The music industry has been particularly affected by the COVID-19 pandemic, especially in the context of the live music industry. A report by the OECD noted that whilst there were major losses, the impact of this has been partially mitigated by the fact that 50% of the revenue in the industry stems from recorded music. However, given that the other 50% consists of live events (concerts, festivals, tours, and solo performances), this has had a large impact on the sector, given that live events have been cancelled, downsized, or postponed. For some music worker categories, their income streams disappeared in the space of a few days following the introduction of restrictions. Furthermore, the cancellation of festivals and trade fairs also had negative effects on the international nature of production and distribution within the sector.

The live music sector has been the most severely impacted by the restrictions on social distancing associated with the pandemic and limited economic activity in many

³³ Contribution of Cultural Strategy, Planning and Assessment Bureau – Portuguese Ministry of Culture 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/impact-cr-portuguese-ministry-of-culture.pdf.

³⁴ Society of Audiovisual Authors 'Press release: CMOs are a safety net for authors, but there must be other lifelines in the current crisis' SAA, 2021, Available at: <a href="https://www.saa-authors.eu/en/news/689-press-release-cmos-are-a-safety-net-for-authors-but-there-must-be-other-lifelines-in-the-current-crisis#.YkVgqDfP23I.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Travkina, E., et al., 'Culture shock: COVID-19 and the cultural and creative sectors' OECD, 2020, Available at: https://read.oecd-ilibrary.org/view/?ref=135 135961-nenh9f2w7a&title=Culture-shock-COVID-19-and-the-cultural-and-creative-sectors.

countries. Moreover, even when sanitary measures were reduced between different lockdown phases, musical events have been at risk of suffering from low attendance because of the increasing costs of travelling and accommodation. This can be seen all across the globe. For instance a study commissioned by the South African Cultural Observatory showed that 90% of the live music industry lost income due to COVID-19, and 25% indicated that they would not be able to continue with any elements of their business under lockdown. Meanwhile, a report from December 2020 by the Nashville Chamber of Commerce showed Nashville's many music venues lost 72% of their revenue, costing the industry \$17 million in lost wages and delivering a \$24 million hit to Nashville's GDP. Meanwhile is GDP.

In response to the changes brought about by the pandemic, industry professionals have attempted to respond to the crisis, challenging their traditional model of in-person delivery of services, with many in the sector turning to various online music alternatives and tools, changing the customers' experience, demand, and consumption.⁴⁰ For example, in the Republic of Korea, two of the country's largest media and technology companies partnered up to create 'Beyond LIVE', which is an online streaming and concert service providing real-time customized performances for full-length and full-sized arena shows in which there is no in-person audience. This platform combines live performance and traditional stage production with advanced AR technology, real-time 3D graphics, interactive communication through live video calls between artists and fans, and the ability to synchronize global fans' virtual "lightsticks" and cheers with the live stream concert in real-time. Additionally, Fortnite hosted a live rap concert that attracted almost 30 million live viewers, underlining the potential for cross-industry partnerships to engage users and promote artists in a new way. 41 It is likely that similar approaches will be adopted going forward. However, although streaming and online digital platforms have contributed towards the survival of the sector during the pandemic, the revenue levels from live streaming and Video-on-Demand (VOD) work have not matched earnings from live performance for many in the sector.

There have been other responses using digital tools that focused on spreading education and advocacy for rightsholders in the music industry. Specifically, the International Association for Artists and Rights Holders (IAFAR) rapidly shifted from its in-person seminars to utilizing webinars, social media and remote podcasting recording to deliver information and education. As a result, IAFAR's output, outreach and membership significantly increased and the use of graphic visuals as a tool to teach intellectual property rights at the basic level and within the music industry was extremely useful.

Online streaming has become the natural response to carry on live music performance activity during the national lockdowns and amid social distancing rules. However, considering the uncertainty characterizing this pandemic, some doubts have been raised about its long-term impact on the music industry. When and where conditions are still far from the "normality" scenario/ex-ante pandemic scenario, further restrictions may be placed on the

³⁸ South African Cultural Observatory 'Impact Analysis Live Music and its Venues and the South African economy during COVID 19', 2020, Available at: https://www.southafricanculturalobservatory.org.za/article/sa-culturalobservatory-releases-report-on-the-impact-of-covid-19-live-music-sector.

³⁹ McCall, J., et al., 'Music Industry Report' Nashville Area Chamber of Commerce, 2020, Available at: https://www.nashvillechamber.com/research/music-industry-report.

⁴⁰ South African Cultural Observatory 'Impact Analysis Live Music and its Venues and the South African economy during COVID 19', 2020, Available at: https://www.southafricanculturalobservatory.org.za/article/sa-cultural-observatory-releases-report-on-the-impact-of-covid-19-live-music-sector.

⁴¹ Ketchum, W., 'Fortnite's Travis Scott concert was historic. But he's not the only artist getting creative' NBC news, 2020, Available at: https://www.nbcnews.com/think/opinion/fortnite-s-travis-scott-concert-was-historic-he-s-not-ncna1195686.

⁴² Contribution of IAFAR Ltd 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/cr-impact-iafar.pdf.

number of attendees, negatively impacting the format of such events. Some scholars⁴³ have raised concerns regarding the exclusive character that music festivals might have because of space limitations and a corresponding ticket price increase. In contrast to this scenario of restricting access to some music events, a democratic access approach could be maintained and part of these music events could be performed with the support of digital tools (i.e., augmented and virtual realities or immersive technologies). In the long term however, stakeholders note that it is unlikely that the core value chain of the music industry will change too dramatically. 44 It is therefore expected that the previous operating model whereby artists and labels retain close links to streaming platforms, venue operators and event promoters to distribute music, will remain dominant following the pandemic.

In regard to physical sales, which represent around 20% of recorded music revenues, these were down by about one-third in 2020, although growth was evident in 2021. 45,46 This could be expected given the closure of retail stores, thereby limiting people's access to purchase music in physical formats, but digital sales also decreased. 47 In 2021, recorded music revenues increased 18.5% over 2020 and reached the highest revenue levels in this millennium, although there was a notable decline in revenue generated by downloads and other digital ownership formats as the trajectory of digital music consumption continued to move from an ownership to an access model.

These findings could suggest that there would be a possible rise in demand for streaming as an alternative to physical sales, given that many people were forced to stay at home and work remotely. However, a study conducted during the pandemic found that the actual case was that the pandemic significantly reduced the consumption of audio music streaming in many countries. 48 This can be partially explained due to the fact that this type of music consumption is often not standalone entertainment, but complements other activities that declined during lockdowns, such as commuting. The decline may also reflect a reduction in many people's available disposable income. In more than two-thirds of the countries studied that enforced lockdowns, music streaming volume declined significantly following lockdown measures, and on average, audio music consumption decreased 12.5% after the World Health Organization (WHO) pandemic declaration on March 11, 2020. As a result, during the pandemic, Spotify lost \$838 million of revenue in the first three quarters of 2020 in the countries studied. 49 These results also pointed towards a partial rebound in streaming volume in countries with a decrease in COVID-19 cases and where restrictions had been loosened, meaning that looking ahead, any resurgence of new cases of the virus that result in new lockdown measures could potentially lead to decreased streaming demand in the future. In some countries however, the use of digital services for music streaming increased during the pandemic outbreak in April 2020 compared to the pre-pandemic period, as exemplified by

⁴³ Davies, K., 'Festivals Post Covid-19' Leisure Sciences, 2020, Available at: https://www.tandfonline.com/doi/full/10.1080/01490400.2020.1774000, UK Department for Culture Media and Sport 'Classifying and Measuring the Creative Industries', 2013, Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/203296/Classif ying and Measuring the Creative Industries Consultation Paper April 2013-final.pdf.

44 Hall, S., 'This is how COVID-19 is affecting the music industry World Economic Forum', 2020, Available at:

https://www.weforum.org/agenda/2020/05/this-is-how-covid-19-is-affecting-the-music-industry/.

 ⁴⁵ IFPI 'Global music report 2021', 2021, Available at: https://gmr2021.ifpi.org/report.
 ⁴⁶ IFPI 'Global music report 2022', 2022, Available at: https://globalmusicreport.ifpi.org/

⁴⁷ Hall, S., 'This is how COVID-19 is affecting the music industry World Economic Forum', 2020, Available at: https://www.weforum.org/agenda/2020/05/this-is-how-covid-19-is-affecting-the-music-industry/.

⁴⁸ Kizielewicz, C., 'Music Streaming Consumption Fell During COVID-19 Lockdowns' Carnegie Mellon University, 2021, Available at: https://www.cmu.edu/news/stories/archives/2021/july/music-streaming-down-duringpandemic.html#:~:text=In%20more%20than%20two%2Dthirds,declaration%20on%20March%2011%2C%202020 49 Ibid.

the share of Finnish respondents using Spotify and Facebook for music streaming.⁵⁰ **Digital access to music became the only option at certain points during the pandemic**, and therefore it is vital for the economic survival of labels, performers and authors.

During the pandemic, musicians turned to utilizing digital platforms in an increased manner in order to engage with their fans and followers, but also as a means to regain some lost revenue in light of the cancellation of live performances. Another strategy enabling these creatives to keep in touch with their fans was to record their performances in advance and share them as screencasts, suggesting the manner in which people consumed music also changed to some degree during the pandemic. For example, Chinese company Tencent Music Entertainment (TME) reported in May 2020 that they identified changes to listening behavior during the pandemic, with more consumers using home applications on TVs and smart devices to listen to music. Spotify also embraced virtual events, with the announcement in 2020 of the addition of virtual event listings in the Spotify app. Turthermore, the rise of TikTok is having a significant effect on music consumption. There is a huge demand for music content, which has not only brought many new opportunities but also provided a new content promotion and distribution channel. TikTok is also developing its own streaming service, which is expected to contribute to these evolving dynamics.

For artists, the pandemic highlighted a great 'digital divide' between established musicians and new and emerging artists. This is particularly the case in the developing world whereby multiple waves of the pandemic, new strains and stalled and slow vaccine rollouts had an impact on already struggling artists. A survey conducted by the HEVA Fund in Kenya found that although musicians had turned to digital platforms, it was challenging to get attention because of the oversaturation in the online market, and electricity and internet connectivity issues frustrated their streaming experience. Streaming during the pandemic also presented problems for some consumers. In wealthier countries, where internet access, data and electricity are abundant and affordable, streaming was a suitable solution to allowing consumption of music. Nevertheless, in developing countries services may be less dependable and costs are higher, and this leads to potential inequalities. According to the United Nations Conference on Trade and Development (UNCTAD), in the least developed countries, more than 55% of the people do not have adequate access to power, which means a lack of unlimited streaming for these audiences. ⁵⁶ A study by the South African Cultural Observatory noted that the country's digital divide precluded many from participating in the shift to online music, and also blocked access for many who intended to adopt digital transformation strategies to survive.57

⁵⁰ Statista 'Use of digital services for streaming music before and during the COVID-19 outbreak in Finland in 2020', 2022, Available at: https://www.statista.com/statistics/1147712/coronavirus-impact-on-the-use-of-digital-services-for-streaming-music-in-finland/.

⁵¹ Henderson, M., 'How COVID-19 exposed music industry fault lines and what can be done' United Nations Conference on Trade and Development (UNCTAD), 2021, Available at: https://unctad.org/news/how-covid-19-exposed-music-industry-fault-lines-and-what-can-be-done.
⁵² Hall, S., 'This is how COVID-19 is affecting the music industry World Economic Forum', 2020, Available at:

https://www.weforum.org/agenda/2020/05/this-is-how-covid-19-is-affecting-the-music-industry/.

⁵³ Perez, S., 'Spotify adds virtual event listings to its app' TechCrunch, 2020, Available at: https://techcrunch.com/2020/09/15/spotify-adds-virtual-event-listings-to-its-app/?guccounter=1.

⁵⁴ Leight, E., "If You Can Get Famous Easily, You're Gonna Do It': How TikTok Took Over Music' Rolling Stone, 2019, Available at: https://www.rollingstone.com/pro/features/tiktok-video-app-growth-867587/. ⁵⁵ Ibid.

⁵⁶ UNCTAD 'Over half of the people in least developed countries lack access to electricity', 2021, Available at: https://unctad.org/topic/least-developed-countries/chart-july-2021.

⁵⁷ South African Cultural Observatory 'Impact Analysis Live Music and its Venues and the South African economy during COVID 19', 2020, Available at: https://www.southafricanculturalobservatory.org.za/article/sa-culturalobservatory-releases-report-on-the-impact-of-covid-19-live-music-sector.

The pandemic also had a **significant impact in regard to distribution**, whereby a number of artists delayed releases of material despite the ability to release music digitally.⁵⁸ This was mostly due to the inability of artists to use tours to promote new albums and the risk of releasing music to an uninterested, unaware, or overwhelmed public.

In terms of support measures to assist musicians and other professionals involved in the music sector, different approaches and examples can be found across the globe. In April 2020, IFPI launched an online, open access resource⁵⁹ to help those in the sector and in government learn from successful initiatives put in place around the world to support the industry. The website provides detailed information about the initiatives in place (at national and global level); users can filter to find information about help and resources available from a range of bodies, including industry organizations, record labels, governments, the live sector, digital service providers and others.

In Brazil, eight associations that collectively manage music in Brazil decided to help professional artists and composers who were impacted by the cancellation of concerts and performances in establishments closed due to the coronavirus pandemic. 60 In total, R\$ 14 million of aid was made available through an advance, in cash, of the values referring to royalties, which was available to 22,000 professionals, including musicians, composers and performers from across the country. In Portugal, the Portuguese Society of Authors (SPA) provided a human resources team to help authors apply to support measures, asked municipalities for an advance of 40% of the value of the contracts for postponed shows and doubled the percentage of advance payment of royalties to music authors and publishers. In Australia, the Government's Creative Economy COVID-19 support package included a range of measures, such as the \$200 million Restart Investment to Sustain and Expand (RISE) Fund which provides project funding for festivals, concerts, tours and events. In Senegal, the Senegalese Copyright and Related Rights Office (SODAV) set up a two-step resilience plan. The first step consisted of an allocation of CFA francs 120 million, from SODAV's reserves, which included a social fund for CFA francs 70 million, allocated to 2,600 beneficiaries, who received 30,000 CFA francs each and a 30% advance on the lesser of their last three distributions. In a second phase, SODAV made an advance on distribution of 98 million CFA francs to members, with 70 million CFA francs allocated to music rights and 31 million to digital rights. In Spain, in order to offset the lack of governmental support in the industry, the Artistas Intérpretes o Ejecutantes (AIE), a management entity for music performers and executant musicians, implemented several measures. These measures included creating an emergency aid fund of around €3 million for its most vulnerable members, from which more than 3,100 members benefited, endowed mainly through income from private copying. 61 It further reduced its management costs by 12% in order to increase the funds made available to its members, and signed a cooperation agreement with CREA (Sociedad De Garantía Reciproca), where AIE members were able to finance 144 different musical projects.

3. PUBLISHING

The COVID-19 pandemic has taken a significant toll on the global publishing industry. **Owing** to the cancellations of book fairs and industry events, lockdown measures being placed, and the disruption of global supply chains, global publishing sales have been

⁵⁸ Leight, E., 'They Were Going to Be Spring's Biggest Albums — Until COVID-19 Hit' Rolling Stone, 2020, Available at: https://www.rollingstone.com/pro/features/album-delays-caused-by-covid-19-973870/.

⁵⁹ See: https://musicresponsecovid-19.ifpi.org

 ⁶⁰ Gandra, A., 'Covid-19: associacoes adiantam direitos autorais a musicos', Agencia Brasil, 2020, Available at: https://agenciabrasil.ebc.com.br/geral/noticia/2020-04/covid-19-associacoes-adiantam-direitos-autorais-musicos.
 ⁶¹ Contribution of Artistas Interpretes o Ejecutantes – EDGPI (AIE) 'Solicitud de información para la sesión informativa sobre la repercusión de pandemia de Covid´+í en el ecosistema del derecho de autor', WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/es/docs/impact-cr-edgpi.pdf.

heavily hit. 62 The global book publisher's market declined by up to 7 billion dollars in 2020 as a result of the closure of bookstores, and existing issues relating to the rise of digital platforms such as e-books, which were already causing challenges for independent bookstores and libraries, were further exacerbated by the effects of the pandemic. 63 The exponential shift to digital and online distribution mechanisms has continued to increase, but even online sales (particularly of educational literature needed for studying from home) have only partially compensated for the revenue losses.⁶⁴ Major publishing industry events are the lifeblood of the bulk of the book business, and with these being cancelled or postponed, the effort to shift to digital may not be enough. 65 Furthermore, with the global rise of commodity prices and partly due to the impacts of COVID-19, paper and raw material shortages and increase of haulage costs are also impacting publishers around the world, especially for those that rely only on physical formats and cannot yet enter the digital market. 66

These cancellations and postponements affect new title releases, and in turn have sunk author's and publisher's revenues. 67 A survey by the European Writer's Council (EWC) showed that cancellation of in-person paid live events in venues, such as festivals, readings and lectures, are the primary cause of income loss. Indeed, 77% of all authors included in the survey were challenged by cancelled live events and cancellation fees were not paid in 90% of those cases⁶⁸. In 2020, only one out of the 13 international book fairs that were scheduled to take place around the world went ahead as originally planned, and more than 50% of the fairs were postponed. 69 Support for the industry has not met expectations either, with a few exceptions, as many governments around the world have not provided significant financial support to the sector. 70 Based on data from 2020 from the EWC, there was a reduction of new publications in Europe of almost a third (-150,000 titles), and thus an unprecedented radical reduction in literary diversity. Losing the income from cancelled live events in 2020 and 2021 made matters worse for writers and translators.71

⁶² International Publishers Association (IPA) 'From Response to Recovery: the Impact of Covid-19 on the Global Publishing Industry', 2020, Available at: https://www.internationalpublishers.org/images/aa-content/news/news-2020/ipa-post-covid-action-plan-report.pdf.

⁶³ Isernia, P., and Lamonica, A., 'The Assessment of the Impact of COVID-19 on the Cultural and Creative Sectors in the EU's Partner Countries, Policy Responses and their Implications for International Cultural Relations' Cultural Relations Platform, 2021, Available at:

https://www.cultureinexternalrelations.eu/downloader/download-file?file=2021/02/CRP COVID ICR Study-final-

Public.pdf.

64 OECD 'Culture shock: COVID-19 and the cultural and creative sectors', 2020, Available at: https://www.oecd.org/coronavirus/policy-responses/culture-shock-covid-19-and-the-cultural-and-creative-sectors-08da9e0e/.

⁶⁵ International Publishers Association (IPA) 'From Response to Recovery: the Impact of Covid-19 on the Global Publishing Industry', 2020, Available at: https://www.internationalpublishers.org/images/aa-content/news/news-2020/ipa-post-covid-action-plan-report.pdf.

⁶⁶ International Publishers Association (IPA) 'IPA underlines publishers' contribution during COVID pandemic at WIPO Copyright Committee', 2021, Available at: https://www.internationalpublishers.org/copyright-newsblog/1109-ipa-underlines-publishers-contribution-during-covid-pandemic-at-wipo-copyrightcommittee#SCCR41JBENG.

⁶⁷ OECD 'Culture shock: COVID-19 and the cultural and creative sectors', 2020, Available at: https://www.oecd.org/coronavirus/policy-responses/culture-shock-covid-19-and-the-cultural-and-creative-sectors-08da9e0e/.

⁶⁸ George, G., et al., What has changed? The Impact of Covid Pandemic on the Technology and Innovation Management Research Agenda Journal of Management Studies, 2020, Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/joms.12634.

⁶⁹ UNESCO 'Cultural and Creative Industries In the Face of COVID-19 An Economic Impact Outlook', 2021, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000377863/PDF/377863eng.pdf.multi.

⁷⁰ International Publishers Association (IPA) 'From Response to Recovery: the Impact of Covid-19 on the Global Publishing Industry', 2020, Available at: https://www.internationalpublishers.org/images/aa-content/news/news-2020/ipa-post-covid-action-plan-report.pdf.

72 Federation of European Publishers (FEP) 'Consequences of the Covid-19 Crisis on the Book Market', 2020,

Available at: https://fep-fee.eu/European-publishing-at-the-time-of.

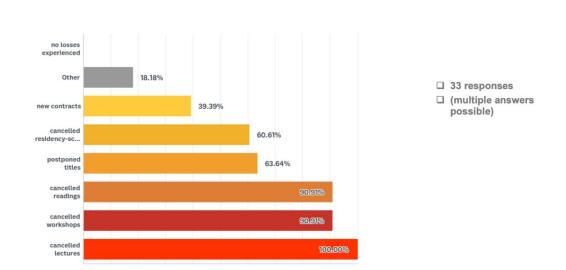


Figure 1 Areas of income loss for European writers during the Covid-19 pandemic

Source: https://europeanwriterscouncil.eu/wp-content/uploads/2020/06/EWC-Survey-Economic-Impact-of-Covid19 11062020.pdf

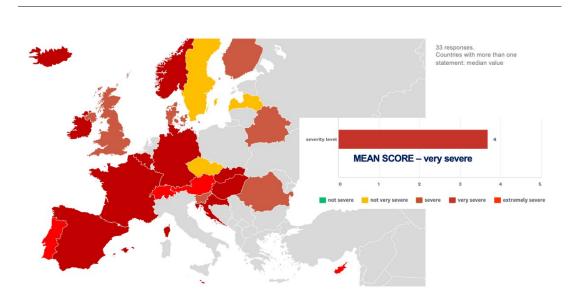


Figure 2 Economic impact on the income of writers and translators in Europe

Source: https://europeanwriterscouncil.eu/wp-content/uploads/2020/06/EWC-Survey-Economic-Impact-of-Covid19_11062020.pdf

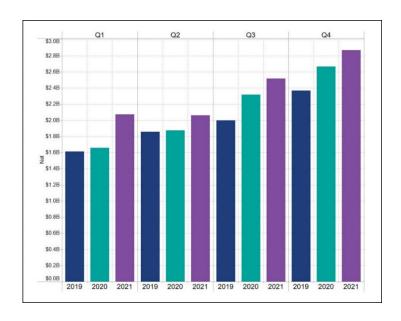
Across the globe, the publishing sector in the majority of countries was hit hard. Specifically, the book market is suffering greatly from the consequences of the pandemic restrictions. According to a survey conducted by the Federation of European Publishers (FEP), the impact of the health crisis resulted in a significant loss of revenue across the European book market. However, the study showed that there is an important difference between states where governments declared a lockdown and states where restrictions short of a lockdown were put in place. This difference affected the timing of the book market's recovery. In countries like Germany, Italy, and Spain, where bookstores closed during a

⁷² Federation of European Publishers (FEP) 'Consequences of the Covid-19 Crisis on the Book Market', 2020, Available at: https://fep-fee.eu/European-publishing-at-the-time-of.

lockdown, bookstore sales dropped by 75 to 95%, whereas in countries like Finland, Sweden, and Norway, where bookstores remained open, book sales were down by 30 to 50% in the first months of the pandemic. Furthermore, the findings of the FEP survey confirmed that, despite a significant increase in online sales, they have not been enough to compensate for the loss of revenue generated by bookshop sales. The pandemic has brought important consequences also in the Asian book market, particularly in China. The book industry experienced its first negative growth in 20 years, with 20% of small and medium sized book companies not having published any books in the first half of 2020 and more than 60% of companies having a tight cash flow. Moreover, a survey conducted by Beijing OpenBook highlights that, although there has been a positive growth in sales in the first half of 2021 over 2020, there are still lags in comparison to the performance of 2019.

The situation seemed to differ in other countries, for example, as seen in the United States. Data from the Association of American Publishers (AAP) show that trade sales in 2020 were ahead of those in 2019 and there were no major bankruptcies. For Specifically, higher education publisher sales increased by 2.3% by end of October 2020 compared to a decrease of 10.9% in 2019, owing to the long-standing investments in digital learning and increasing digital and subscription services throughout 2020 and 2021. Trade book sales also increased (see Figure 3).

Figure 3 United States trade book publishing sector gains by quarter in 2019 and during the first two COVID-19 pandemic years, 2020 and 2021.



Source: https://publishingperspectives.com/2022/01/aap-statshot-the-united-states-publishing-industry-gained-12-2-percent-in-2021-

covid19/

⁷³ lbid.

⁷⁴ Ren, D., and Kang, Z., 'How COVID-19 Has Affected China's Publishing Industry' Nature Public Health Emergency Collection, 2021, Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8294607/.

⁷⁵ Anderson, P., 'Pandemic Effects Weigh on China's 2021 First Half' Publishing Perspectives, 2021, Available at: https://publishingperspectives.com/2021/08/pandemic-effects-weigh-on-chinas-market-in-2021s-first-half-covid19/.

covid19/.

76 Guren, C., et al., 'COVID-19 and Book Publishing: Impacts and Insights for 2021' Publishing Research Quarterly, 2021, Available at: https://link.springer.com/content/pdf/10.1007/s12109-021-09791-z.pdf.

77 Ibid.

Translators were also significantly affected by the pandemic. Prior to the pandemic, translators were already working in precarious circumstances, and working on a book unpaid before any remuneration is received, the uncertainty of the next contract and absence of remuneration rules left many in a persistent fragile income situation. Result, translators are forced to find other side jobs to survive. Moreover, because of COVID-19's second wave in late 2020 and early 2021, publishers were expected to postpone and downsize their programs, and purchase fewer foreign rights for translations, and possibly to reduce fees and editing assignments in general. The EWC survey showed that 66% of the responding translator's organizations reported losses and expected more losses because of fewer new contracts.

Notwithstanding the continuing dominance of print, in order to accommodate the closures of brick-and-mortar businesses and literacy events and fairs, the sector turned towards digital and online commerce. Globally, publishers responded to the different digital trends by diversifying their products to include e-books, audiobooks, and interactive books. However, this was not the case for all publishers. In some low- and middle-income emerging publishing markets the appeal of these digital formats is limited by low mobile device penetration, limitation of digital payment methods, and minimal trust in e-commerce.80 Moreover, with the reliance on digital methods, digital piracy increased. In Spain, the Reproduction Rights Centre (CEDRO) reported that the level of e-book piracy tripled. Over 100 social media channels on Telegram, WhatsApp, or Facebook groups were blocked for exchanging content from books, journals or magazines without consent or royalties.⁸¹ The International Publisher's Association (IPA) states that publishers and authors in Latin American and Africa delayed shifting to digital books due to fears that piracy would devastate their revenues and investment. 82 Specifically, it is reported that in Kenya and Nigeria, despite the interventions by national copyright authorities to enforce the law, the revenues of the publishers and authors are being systematically stolen across online platforms and social media where pirated books are sold, including physical copies.83 In other regions, the immediate drop in demand for printed textbooks for higher education institutions also added to longstanding existing challenges for publishers in the education sector. As an example, in the United States, in August 2020, Moody Investor Service dropped the credit ratings of McGraw Hill and Cengage Learning Inc. from B3 to Caa2, nearly the lowest rating possible without actually delaying debt payments, and had previously cut Pearson Plc to the brink of junk bond rating.84

⁷⁸ European Writers' Council (EWC) 'The Economic Impact of Covid-19 on Writers and Translators in the European Book Sector 2020', 2020, Available at: https://europeanwriterscouncil.eu/wp-content/uploads/2020/06/EWC-Survey-Economic-Impact-of-Covid19 11062020.pdf.

⁷⁹ Ibid.

⁸⁰ International Publishers Association (IPA) 'From Response to Recovery: the Impact of Covid-19 on the Global Publishing Industry', 2020, Available at: https://www.internationalpublishers.org/images/aa-content/news/news-2020/ipa-post-covid-action-plan-report.pdf.

⁸¹ European Writers' Council (EWC) 'One Year of Crisis: The Economic Impact of Covid-19 on Writers and Translators in the European Book Sector 2020-2022', 2021, Available at: https://europeanwriterscouncil.eu/wp-content/uploads/2021/11/ONE-YEAR-OF-CRISIS_EWC-SURVEY_FINAL021121.pdf.

⁸² International Publishers Association (IPA) 'IPA underlines publishers' contribution during COVID pandemic at WIPO Copyright Committee', 2021, Available at: https://www.internationalpublishers.org/copyright-news-blog/1109-ipa-underlines-publishers-contribution-during-covid-pandemic-at-wipo-copyright-committee#SCCR41JBENG.

committee#SCCR41JBENG.

83 International Publishers Association (IPA) 'IPA underlines publishers' contribution during COVID pandemic at WIPO Copyright Committee', 2021, Available at: https://www.internationalpublishers.org/copyright-news-blog/1109-ipa-underlines-publishers-contribution-during-covid-pandemic-at-wipo-copyright-committee#SCCR41JBENG.

⁸⁴ Guren, C. & McIlroy, T., 'COVID-19 and Book Publishing: Impacts and Insights for 2021', 2021, available at: https://link.springer.com/article/10.1007/s12109-021-09791-z

Even with the rise of e-book use, library suppliers are struggling. DawsonEra, part of Dawson Book's e-book platform, shut down in July 2020, ⁸⁵ which was a huge blow not only to academic libraries, but particularly to many Francophone publishers who contracted with the platform to host their content. ⁸⁶ This hindered access to a substantial amount of its contents before other platforms could host it. Such issues with platforms can cause material to be inaccessible or lost, even if libraries had paid for licenses. This therefore causes material in languages other than English to have many fewer digital options available.

As a result of the pandemic, many right holders across the world took steps to provide free access to their content to educational institutes, libraries, research institutions, and the general public. For example, in April 2020, with the support of several publisher partners, Research4Life was able to provide additional access to older content and backfiles which are only available in paper or libraries to its users, effectively supporting those who could not access libraries due to the lockdown measures. Finilarly, in response to the pandemic, the International Association of Scientific, Technical and Medical Publishers (STM) rapidly provided access to a wider range of relevant research, allowing more than 32,000 resources to be made available. What's more, STM worked with publishers to identify and improve the use of resources, and agreements were made to ensure that resources were available in formats that enable machine analysis and reuse. Additionally, as publishers around the globe provided free access to relevant COVID-19 information, the Copyright Clearance Center (CCC) created a resource page to amplify the availability of such open access material.

Authors, publishers, and collective management organizations have been offering facilitated access and extended licenses for digital use for over two years now. While authors often chose join initiatives to offer free or reduced price licenses to support students and the public at large, authors are still suffering from the crisis today. The EWC reports in 2020 and 2021 showed an average income loss of 50-60% for full time authors. 90 As a response, some countries have focused on the implementation and transposition of the EU Directive (2019/790) on Copyright. 91

The closure of bookstores has had an impact on the quality of life, demonstrating the importance of bookstores to society. According to a survey undertaken in Canada, around eight out of ten Canadians believe it is necessary for society to have physical bookstores for people to visit, even if visits have been reduced due to pandemic restrictions. ⁹² In fact, in the first half of 2021, 57% of all respondents and 63% of buyers reported having a physical

⁸⁵ ProQuest 'Preserving Access to Dawson Ebooks', 2020, Available at: https://about.proquest.com/en/blog/2020/Preserving-Access-to-Dawson-Ebooks/.

⁸⁶ International Federation of Library Associations (IFLA) 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/ifla.pdf.

⁸⁷ Harris, S., Nzegwu, F., 'Research4Life 2020 User Review: Final report of findings' inasp, 2021, Available at: https://www.research4life.org/blog/research4life-responded-covid-19-emergency/.

⁸⁸ Contribution of International Association of Scientific, Technical and Medical Publishers (STM) 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem', WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/impact-cr-ecosystems-international-association-of-scientific-technical-and-medical-publishers.pdf.

⁸⁹ Ibid

⁹⁰ European Writers' Council (EWC) 'The Economic Impact of Covid-19 on Writers and Translators in the European Book Sector 2020', 2020, Available at: https://europeanwriterscouncil.eu/wp-content/uploads/2020/06/EWC-Survey-Economic-Impact-of-Covid19 11062020.pdf.

⁹¹ European Writers' Council (EWC) 'One Year of Crisis: The Economic Impact of Covid-19 on Writers and Translators in the European Book Sector 2020-2022', 2021, Available at: https://europeanwriterscouncil.eu/wp-content/uploads/2021/11/ONE-YEAR-OF-CRISIS_EWC-SURVEY_FINAL021121.pdf.

⁹² Hichberg, S, 'The impact of COVID on book buying' Booknet Canada, 2021, Available at: https://www.booknetcanada.ca/blog/2021/10/12/the-impact-of-covid-on-book-buying.

bookstore near them, and 24% stating that their primary reason for visiting is to search for books in their spare time. 93

In regard to reading trends, according to a survey by the International Publishers Association (IPA), in almost 60% of the countries polled, **the pandemic has enabled readers to read more in general and readers are increasingly utilizing digital reading formats**. ⁹⁴ A big factor affecting this trend is a country's reading culture, as well as the competition for reader attention from streaming media, social media, video games, and TV, and access to the internet and digital delivery infrastructure. While digital reading trends have significantly changed publishers' product, distribution, and operational decisions as the pandemic continues, it is still unclear whether digital reading trends will continue post-pandemic.

Digitalization was not the only answer to most of the challenges in the publishing sector. Clearly, the COVID-19 pandemic further articulated the importance of using digital tools and embedding them in an organization's business model, integrating them to generate synergies with the traditional tools and strategies used in the pre-pandemic time. Innovative new business models in the industry have emerged as a direct consequence of the lockdown restrictions, and may lead to positive changes in the medium to long term. In the United Kingdom and United States, an online platform called 'Bookshop.org' was launched with the aim to safeguard the independent literary community. The platform allows independent bookstores to set up their own virtual shopfront on the website and the platform manages both customer service and shipping. Yet, the independent stores receive the full profit margin (30%) of the cover price) from each sale. It has since generated more than \$11.5 million for independent bookstores throughout the United States.95 Libraries have also adapted. In Nairobi, a firm called 'Book Bunk' is working to restore public libraries in the city, in part by implementing technology to control collections management and build online catalogues, while providing digital skills training for librarians and library users. 96 In Paris, the bookstore Shakespeare and Company launched a membership scheme that offers a range of different benefits, such as curated book selections and possibilities to participate in book clubs. Supporters from across the globe has since signed up to it, and other independent bookstores have followed its footsteps to success.97

Several IPA members have conducted various measures to respond to COVID-19, from lobbying their governments for stimulus programs, to providing online support resources, online training, business assistance, capacity building, and peer support. For example, the Indonesian Publisher's Association provided online training on eBook development and sales, as well as online marketing, and partnered with several online marketplaces such as Tokopeida, Bukulapak and Google. ⁹⁸ In Egypt, following the cancellation of Egypt's two major book fairs, the Egyptian Publisher's Association gained support from the Ministry of Culture's Libraries and the General Authority of Culture Palaces to direct a significant portion of the budget allocated for book purchases to support its members. ⁹⁹

⁹³ Ibid.

⁹⁴ International Publishers Association (IPA) 'From Response to Recovery: the Impact of Covid-19 on the Global Publishing Industry', 2020, Available at: https://www.internationalpublishers.org/images/aa-content/news/news-2020/ipa-post-covid-action-plan-report.pdf.

⁹⁵ UNESCO 'Cultural and Creative Industries In the Face of COVID-19 An Economic Impact Outlook', 2021, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000377863/PDF/377863eng.pdf.multi.

⁹⁶ Ibid.

⁹⁷ Ibid

⁹⁸ International Publishers Association (IPA) 'From response to recovery The impact of Covid-19 on the global publishing industry', 2020, Available at: https://www.internationalpublishers.org/images/aa-content/news/news-2020/ipa-post-covid-action-plan-report.pdf.

⁹⁹ Ibid.

In relation to the effects of intellectual property rights, many right holders across the world have taken steps to provide free access to their content to educational institutes, libraries, research institutions, and the general public. For example, the content made available includes free access to educational texts and eBooks. 100 Despite these efforts however, certain developments have threatened to undermine the rights and interests of authors and copyright owners during the pandemic. 101 Specifically, there have been reports regarding the promotion of copyright infringement, deliberate misappropriation of intellectual and financial investments of authors and publishers, and disregard of copyright law. In some countries, national libraries and policy makers have rejected offers to enable unauthorized mass digitization projects, refusing to collaborate in copyright infringement. 102

4. VISUAL ARTS

The effects of the pandemic on the visual arts sector were felt all across the globe. A study by EY noted that the European visual arts sector suffered a 38% loss in turnover in 2020 compared to 2019 (€-53 billion). ¹⁰³ One study which looked at the impact of COVID-19 on the art gallery sector reported that galleries based in Africa (42%); Germany and Spain (38%); and the UK (36%) were more likely to report downsizing of their team than those elsewhere. ¹⁰⁴ Across the South and Central American regions, it is estimated that 53% of crafts organizations experienced a decrease in revenue of more than 80% in 2020. ¹⁰⁵ An industry survey also found that art galleries in France experienced losses of €84 million in the second quarter of 2020. ¹⁰⁶

The visual arts were highly affected by the measures that came with the pandemic, particularly given the closure of art galleries, museums and auction houses. Given that the sector also largely relies on big events, fairs and biennales, the restrictions on travel and social gatherings brought about by the pandemic had a profound negative effect on the international visual art market and its related ecosystem. This had a great effect on visual artists, who lost the possibility of income from the exhibition of their works or from their sale and resale. 107 According to the European Visual Artists (EVA), the financial losses registered in Europe in 2020 obliged artists to abandon their artistic profession to seek alternative sources of income and reduce artistic activity to a hobby. 108

Gurry, F., 'Intellectual property, innovation, access and COVID-19' WIPO, 2020, Available at: https://www.wipo.int/wipo_magazine/en/2020/02/article_0002.html.
 International Publishers Association (IPA) 'IPA underlines publishers' contribution during COVID pandemic at

WIPO Copyright Committee', 2021, Available at: https://www.internationalpublishers.org/copyright-news-blog/1109-ipa-underlines-publishers-contribution-during-covid-pandemic-at-wipo-copyright-committee#SCCR41JBENG.

To Copyright Alliance, 'Internet Archive Continues To Harm Authors', available at:

Copyright Alliance, 'Internet Archive Continues To Harm Authors', available at: https://copyrightalliance.org/trending-topics/internet-archive-harms-authors/, International Publishers Association, 'From response to recovery - the impact of covid-19 on the global publishing industry', 2020, available at: https://www.internationalpublishers.org/images/aa-content/news/news-2020/ipa-post-covid-action-plan-report.pdf
 Lhermitte, M., et al., 'Rebuilding Europe, the cultural and creative economy before and after the COVID-19 crisis' Ernst & Young, 2021, Available at: https://www.rebuilding-europe.eu/ files/ugd/4b2ba2 1ca8a0803d8b4ced9d2b683db60c18ae.pdf.

¹⁰⁴ McAndrew, C., 'The Art Market 2022' Art Basel and UBS, 2022, Available at: https://d2u3kfwd92fzu7.cloudfront.net/The Art Market 2022.pdf.

 ¹⁰⁵ UNESCO 'Evaluación del impacto del COVID-19 en las industrias culturales y creativas', 2021, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000380185?1=null&queryId=N-a3e3a6bd-cf60-40da-b09d-c604a0430750.
 106 OECD 'Culture shock: COVID-19 and the cultural and creative sectors', 2020, Available at:

https://www.oecd.org/coronavirus/policy-responses/culture-shock-covid-19-and-the-cultural-and-creative-sectors-08da9e0e/.

¹⁰⁷ European Visual Artists (EVA) 'Covid-19 will be catastrophic for Visual Artists. Let's protect them!', 2021, Available at: https://www.evartists.org/covid-19-will-be-catastrophic-for-visual-artists-lets-protect-them/.

¹⁰⁸ Ibid

A study conducted by Americans for the Arts underlines that the financial loss experienced by non-profit artistic and cultural American associations amounted to around \$17.97 billion in July 2021¹⁰⁹. In April 2021, people in 959,000 jobs had been laid off and, although there was some increase in art jobs by January 2022 (from \$1.2 million in April 2020 to \$2.1 million in January 2022), the number is still down from the pre-pandemic level 110). The survey administered by Americans for the Arts in April 2021 identified the closure of cultural and art venues as the main reason for the considerable loss of income for the creative industry. A survey by the United States Census Bureau reported that arts, entertainment, and recreation industries are among the most likely to take longer than six months to recover from the pandemic. 111 Figures from the International Confederation of Societies of Authors and Composers (CISAC) indicate that the visual arts sector around the world saw a 19.9% copyright collections increase in the years 2014-2018, but it had already been declining between 2017-2018 by 18.4%. Visual arts collections declined slightly in 2019, but big losses were expected in 2020, particularly as resale right royalties for visual artists paid by galleries and auction houses ground to a halt. 112 The resale right enables artists to earn a share of the proceeds when their works are resold by auction houses and galleries, which can represent a crucial income to the creator when works are re-sold.

Regarding the shift to digital, the remuneration of visual artists in the digital sector has not caught up with offline remuneration, which left them particularly vulnerable to the impacts of the pandemic. Online revenues from visual arts are not enough to offset the loss of the offline revenues, especially taking into account the higher risk of piracy and unauthorized uses. Also concerning in the long term is that studies have suggested that 1 in 8 museums in the EU may never reopen. In France alone, 1 out of 3 art galleries are projected not to reopen. 113 A particular issue that left the sector vulnerable during the pandemic is that royalties generated by the use of visual works on digital platforms provide a minimal amount of the revenue generated in the sector. Figures from CISAC reveal that digital works generate just 3.4% of total collections, despite the fact that there was 26.4% growth in 2019.

However, the sector quickly tried to move towards digital solutions to offset the impact and to grow its resilience, which has led to some major structural transformations for the sector. 114 For example, one study indicates that social media is now ranked as the sector's third most important sales channel, ahead of fairs, and industry experts note that these trends are not just temporary responses to the pandemic but they represent structural changes to the sector that increase interest and interaction. 115 A specific example of how digital transformation impacted the visual art world can be found in Uganda, whereby the Kampala Art Biennale teamed up with web-developers, creative thinkers, 3D-experts, game designers and digital artists to create a new multi-sensory way of experiencing a biennale in a virtual space. Networking was enabled through the use of chatrooms and webinars, which allowed the possibility for interaction between artists and audiences. The virtual biennale was turned into a virtual archive and remains accessible beyond the original exhibition. ¹¹⁶ As a further example, Art Basel brought forward the launch of its Online Viewing Rooms to support the galleries and artists that had been due to show at Art Basel Hong Kong 2020. 117 In total, 235 exhibitors took part, showing more than 2,000 works, with an aggregate value of approximately US\$270 million. This inaugural edition brought galleries, collectors, and artists together during this time of social distancing, attracting the attention of a worldwide audience of over 250,000 visitors.

¹⁰⁹ American for the Arts (2022). https://www.americansforthearts.org/node/103614

¹¹⁰ US Bureau of Labor Statistics, 2022

¹¹¹ Ibid.

¹¹² The International Confederation of Authors and Composers (CISAC) 'Covid-19: Crisis, Resilience, Recovery', 2020, Available at: https://www.cisac.org/Media/Studiesand-Reports/Publications/Royalty-Reports/2020-CISAC-Global-Collections-Report-EN.

113 European Visual Artists (EVA) 'EU Visual Art Sector Suffers -38% Loss Due to Covid-10, Study Says', 2021, Available at: https://www.evartists.org/wp-

content/uploads/2021/01/20210126-EVA-press-release EY-study.pdf.

114 UNESCO 'Cultural and Creative Industries In the Face of COVID-19 An Economic Impact Outlook', 2021, Available at:

¹¹⁶ Kampala Biennale 'Kampala Art Biennale 2020 Virtual', 2020, Available at: https://kampalabiennale.org/.
117 Art Basel 'Online Viewing Rooms: 'Art Basel has paved the way for what's to come', says exhibitor', 2020, Available at: https://www.artbasel.com/stories/online-viewingrooms-roundup.

Having set up more Online Viewing Rooms for subsequent art fairs, Art Basel is now starting to charge entry for the Online Viewing Rooms, creating a new, digital business model for art fairs.

The year of 2020 took a serious toll on the art market around the world following the outbreak of the COVID-19. This was especially true in the first half of the year, when most offline activities were cancelled, and the art market worldwide came to a standstill at one point. To face this unexpected change, the global art market rose to the occasion after a short period of adaptation and adjustment. Online resources were immediately activated for art exhibitions, primary market galleries, as well as secondary market auctions, to be brought online within an extremely short period of time. The period was also characterized by social solidarity, collaborations between galleries and auction companies, innovations in sales formats, and an intensive development of digital tools. According to the Artprice report, in 2020, 'remote' auctions became the new norm, with some vendors going the whole distance by offering 'online only' sales (i.e., without an auctioneer). Specifically, during the first lockdown there was a considerable increase in connections with a larger, younger audience and an influx of new bidders. This generated a very positive sales rate (76%) from this renewed audience. For example, in 2020, Christie's generated a 262% increase in online sales and Phillips' online sales rose by 134%. In 2021, the global art market regained much of its customary dynamism. In short, an emergency situation ultimately had positive repercussions on the structure of auction houses and on the quality of exchanges, accelerating the art market's digital transformation and its expansion of transaction volumes. The world's major auction houses are today models of adaptability. The paradigm shift, represented by the digital revolution, seems to have reached all of the market's players, local and international, large and small. Clearly, digitization has opened up auctions to a huge new customer base, particularly 30- and 40-year-olds, who rarely dabbled in the market previously. Auction houses, dealers and artists, and other stakeholders in the art ecosystem are accelerating their capabilities with online sales platforms, social media offerings and a greater focus on data and analytics. In parallel, innovation and integration of augmented reality, virtual reality and mixed reality technologies have improved services for art exhibitions, online transactions, education and promotion, etc., creating a better user experience.

In regard to financial support, governments and sectoral organizations implemented measures during the pandemic to try to mitigate the impacts of the pandemic on the sector. The US engaged around \$54 million to regional and state arts organizations through the American Rescue Plan. The Canadian government proposed to provide \$300 million over two years to Canadian Heritage to establish a Recovery Fund for the Arts, Culture, Heritage, and Sport Sectors as part of the Canada emergency Wage Subsidy. In France, the French visual arts society (ADAGP) continued paying royalties and steered members to funding programs. Furthermore, emergency funds of around €750k, were contributed to the National Centre for Fine Arts (CNAP) and the National Book Centre (CNL) in partnership with the Société des Gens de Lettres (SGDL). ADAGP lobbied for a support system for artists, increased protection for the exposition of works and stronger negotiating power with major digital service providers.

Governments and national art associations in some countries established funds to show solidarity and provide financial support to authors, publishers, and artists facing difficult pandemic conditions. For instance, the Mauritius Republic has invested in assisting artists by distributing Rs19 million in 2020. The assistance provided by the Mauritius

¹¹⁸ National Endowment for the Arts, 'The American Rescue Plan', 2021, Available at: https://www.arts.gov/COVID-19/the-american-rescue-plan.

¹¹⁹ Canadian Government, 'Continued Support for Arts, Culture, Heritage and Sport Sector Organizations', 2021, Available at: https://www.canada.ca/en/canadian-heritage/news/2021/06/continued-support-for-arts-culture-heritage-and-sport-sector-organizations.html

government to artists could be a significant turning point in the fight for the legal recognition of artists as a profession. ¹²⁰ In the Southeast Asia region, the governments of Singapore and Penang provided direct financial assistance to artists. ¹²¹ Additionally, the Italian government issued a decree to allocate a total amount of €11.4 billion in 2021 to aid professionals of several sectors, among which arts. Another example is the Finnish government, which in 2021 proposed a €15 million supplementary budget for the Arts Promotion Centre Finland. In some cases, the efforts of governments to assist the national cultural and creative sectors have been considered inadequate by artists, who continue to feel abandoned and forced to live in unsustainable conditions. To explain this, some authors ¹²² refer to the fact that government support is often directed to institutions and not to the creative workforce, on whose work the industry is reliant.

[Part II follows]

¹²⁰ Available at: https://www.lemauricien.com/. lemauricien.com/. lemauricien.com/.

¹²¹ Available at: https://bangkok.unesco.org/. bangkok.unesco.org, 2021

¹²² Consequences of the Covid-19 Pandemic on Creators and the Creative Industry (2022). WIPO material.

PART II: CULTURAL HERITAGE INSTITUTIONS, EDUCATION AND RESEARCH

In this chapter we will provide an overview of the main trends and impacts identified per sector, based on the situation created by the COVID-19 pandemic. Additionally, a description of the types of measures taken to address the impacts is provided. Three different sectorial institutions are provided in this section: museums, libraries and archives, and education and research institutions.

1. MUSEUMS

The COVID-19 pandemic has had a considerable impact on museums all around the world, whereby due to lockdown restrictions, physical collections and gallery spaces were inaccessible to the public for extended periods of time. The three surveys carried out in April 2020, October 2020 and May 2021 by the International Council of Museums (ICOM) provide a comprehensive overview. In April 2020, whilst the situation for museums varied across the globe, almost 95% of institutions were forced to close to safeguard the wellbeing of staff and visitors, resulting in severe economic, social and cultural repercussions. In the fall of 2020, the situation for museums was more varied, with stark regional differences in terms of opening rates and economic impact.

Overall, the situation of museums in the spring of 2021 worsened slightly compared to the previous year, but this was inconsistent across countries, regions and continents: while the overwhelming majority of museums in Africa and the Pacific were open, in Europe and North America they had only started to reopen their venues. The situation for Asia, Latin America and the Caribbean and Arab Countries was inconsistent at the local level. This was also included in a report, which finds that 85,000 museums (approximately 90% all of the world's museums) have been affected by temporary closures as part of the measures taken to combat COVID-19.¹²³

Additionally, **global tourism was heavily disrupted** throughout 2020 and 2021, with 2020 considered the worst year on record for tourism, when international arrivals decreased by 73%. ¹²⁴ In Europe, where the European Commission estimates that cultural tourism accounts for 40% of all European tourism and where 4 out of 10 tourists choose a destination based on its cultural offering, this had particularly profound economic effects for museums. ¹²⁵ In particular, private museums were severely affected, resulting in bankruptcies and, according to ICOM, more than one in ten museums may never reopen. ¹²⁶

Additionally, ICOM noted that whilst the majority of museum staff were able to work from home during lockdowns, many staff members lost their jobs as temporary contracts were terminated

https://ec.europa.eu/growth/sectors/tourism/offer/cultural_en.

¹²³ UNESCO 'Museums around the world in the face of COVID-19', 2020, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000373530.

¹²⁴ UNWTO 'Impact Assessment of the Covid-19 Outbreak on International Tourism', 2021, Available at: https://www.unwto.org/impact-assessment-of-the-covid-19-outbreak-on-international-tourism#:~:text=International%20tourism%20experienced%20a%204,2019%2C%20according%20to%20prelimin ary%20estimates.

¹²⁵ European Commission 'Cultural Tourism', 2022, Available at:

¹²⁶ UNESCO 'Museums around the world in the face of COVID-19' 2020, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000373530.

or not extended.¹²⁷ In the different COVID-19 waves, the employed personnel has been increasingly downsized. **The situation for museum personnel remains critical**, this is particularly true for freelance professionals. Following the evolution of the three ICOM reports, there is a sharp decrease in the percentage of museum-related work in the total income of freelancers. The percentage of workers for whom consultancy for museums equals at least 50% of their income fell from 56.9% to 32.5%.

One of the major developments that took place during the pandemic was the need for museums to offer different ways to engage with audiences, which mostly involved a move to digital initiatives. One of the most interesting figures from the surveys carried out ICOM has been the massive shift to digital activities. This trend increased sharply between the first two surveys. Prior to the pandemic, there was little digital to be seen in museums, and even digital art was mostly excluded. 128 The COVID-19 crisis meant that digital was the main source of revenue and the main way to engage with the public and audiences for many museums. The major changes prompted museums to rethink their strategies, address questions of relevance, and find new virtual solutions rather than physical interactions. Therefore, virtual tours, collection online, online exhibitions, online learning programs, an intensive activity on social media, special podcasts, and even video games and gamification emerged as alternative solutions to experiencing heritage, and many in the sector agree that although digital cannot substitute for traditional site visits, these new means offer new and complementary benefits for institutions. 129 For instance, immediately following the initial outbreak of the pandemic, China's National Administration of Cultural Heritage issued a statement requesting the country's state-owned and private museums to share their exhibitions online to encourage the determination and morale of local people to fight the epidemic. 130

Although already prior to the pandemic many museums offered online catalogues of their collections to the public, online provision of digitized content was, and continues to be, surrounded by a cloud of legal uncertainty due to differences in the copyright status of the art works. While with art works available in the public domain museums face no legal issues showcasing them online, with copyrighted works of art, museums usually must obtain specific permission (often in a form of license) from the exclusive right holder for such use, as although they might own a physical copy of the work they do not automatically have a right to copy or display it online. Subject to national jurisdiction-specific limitations and exceptions, museums can be sometimes exempt from having to obtain authorization of the right holder

¹²⁷ International Council of Museums 'Museums, museum professionals and COVID-19', 2020, Available at: https://icom.museum/en/news/museums-museum-professionals-and-covid-19-survey-results/, International Council of Museums 'Follow-up survey: the impact of COVID-19 on the museum sector', 2020, Available at: https://icom.museum/en/covid-19/surveys-and-data/follow-up-survey-the-impact-of-covid-19-on-the-museum-sector/, International Council of Museums 'Museums, museum professionals, and COVID-19: Third Survey', 2021, Available at: https://icom.museum/wp-content/uploads/2021/07/Museums-and-Covid-19 third-ICOM-report.pdf.

¹²⁸ Giannini, T., and Bowen, J., 'Museums and Digital Culture: From Reality to Digitality in the Age of COVID-19' Heritage, 2022, Available at: https://www.mdpi.com/2571-9408/5/1/11, International Council of Museums 'Museums, museum professionals and COVID-19', 2020, Available at: https://icom.museum/en/news/museums-museum-professionals-and-covid-19-survey-results/, International Council of Museums 'Follow-up survey: the impact of COVID-19 on the museum sector', 2020, Available at: https://icom.museum/en/covid-19/surveys-and-data/follow-up-survey-the-impact-of-covid-19-on-the-museum-sector/, International Council of Museums 'Museums museum professionals, and COVID-19: Third Survey', 2021, Available at: https://icom.museum/wp-content/uploads/2021/07/Museums-and-Covid-19 third-ICOM-report.pdf.

content/uploads/2021/07/Museums-and-Covid-19 third-ICOM-report.pdf.

129 UNESCO 'Cultural and Creative Industries In the Face of COVID-19 An Economic Impact Outlook', 2021, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000377863/PDF/377863eng.pdf.multi.

¹³⁰ British Council 'COVID-19's impact on the arts sector in China', 2020, Available at:

https://www.britishcouncil.org/research-policy-insight/insight-articles/impact-covid-19-arts-sector-china.

¹³¹ World Intellectual Property Organization 'Revised report on copyright practices and challenges of museums', 2019, Available at: https://www.wipo.int/edocs/mdocs/copyright/en/sccr 38/sccr 38 5.pdf.

Benhamou, Y., 'Copyright and Museums in the Digital Age', WIPO Magazine, 2016, Available at: https://www.wipo.int/wipo_magazine/en/2016/03/article_0005.html.

based on the purpose of the online display or on the characteristics of the art work in question, provided the interests of the artist are not unreasonably tethered. 133,134 For instance, in the United States, Canada, and Mexico, the *Guidelines for the Use of Copyrighted Materials and Works of Art by Art Museums* suggests that reproduction of thumbnail-size images of works in a searchable database is fair use – permitted without authorization. 135 Some museums in other countries do not rely on limitations and exceptions at all 136, instead obtaining permission to reproduce works of art as a matter of course as a risk-management measure and/or to preserve relationships with artists. An additional consideration in content digitization is the accessibility of the necessary equipment for it - many museums worldwide partnered up with Google Arts & Culture to provide high-quality virtual content. 137 Many have noted that online collections have traditionally been accessed by students, scholars, and researchers looking for specific information. 138 These tools however do not provide the social gathering function offered by a physical museum, which has led museums to provide an alternative approach to this aspect. 139

COVID-19 forced museums that had to close during lockdowns to accelerate their use of digital and virtual reality tools on offer. Data from ICOM showed that at least 17% of the world's museums enhanced their digital activities during the pandemic, a figure that rises to almost 50% if channels such as social media, livestreaming events or online educational programs are also considered. Institutions with previously integrated digital strategies in place reported a smoother transition compared to institutions that had previously struggled to incorporate digital activities before COVID-19. This raises questions about the maturity and sustainability of these practices in the future.

Major museums and heritage institutions across the world, such as The Metropolitan Museum in New York and The National Museum of Modern and Contemporary Art in Seoul had already existing digital initiatives, such as virtual tours prior to the pandemic, and the pandemic acted as a motivation to improve communication of these initiatives to bring in audiences. 143 Virtual exhibitions and tours include activities such as posting films and videos of time-based art, films of curators providing a guided tour of an exhibition, live-streamed interviews of artists, user-

¹³³ Ibid.

¹³⁴ World Intellectual Property Organization 'Revised report on copyright practices and challenges of museums', 2019, Available at: https://www.wipo.int/edocs/mdocs/copyright/en/sccr 38/sccr 38 5.pdf.

¹³⁵ Association of Art Museum Directors 'Guidelines for the use of Copyrighted Materials and Works of Art by Art Museums', 2017, Available at:

 $[\]underline{\text{https://aamd.org/sites/default/files/document/Guidelines\%20for\%20the\%20Use\%20of\%20Copyrighted\%20Materials.pdf.}$

¹³⁶ This is the same problem experienced by libraries. See Canadian Federation of Library Associations 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/canadian-federation-of-library-associations.pdf.

¹³⁷ Quinones Vila, C.S., 'What's in a Name? Museums in the Post-Digital Age' Santander Art and Culture Law Review, 2020, Available at: https://heinonline-

org.ezproxy.hhs.nl/HOL/Page?collection=journals&handle=hein.journals/saaclr2020&type=Text&id=351.

138 Grant, D., 'America's virtual museums take on new significance as Covid-19 lockdown deepens' The Art
Newspaper, 2020, Available at: https://www.theartnewspaper.com/2020/03/18/americas-virtual-museums-take-on-new-significance-as-covid-19-lockdown-deepens.

139 Ibid

¹⁴⁰ Dawson, A., 'Top online museum and art tours to enjoy from home' The Art Newspaper, 2020, Available at: https://www.theartnewspaper.com/2020/03/13/top-online-museum-and-art-tours-to-enjoy-from-home.

¹⁴¹ International Council of Museums 'Follow-up survey: the impact of COVID-19 on the museum sector', 2020, Available at: https://icom.museum/en/covid-19/surveys-and-data/follow-up-survey-the-impact-of-covid-19-on-the-museum-sector/.

American Alliance of Museums 'TrendsWatch: Navigating a Disrupted Future', 2021, Available at: https://www.aam-us.org/programs/center-for-the-future-of-museums/trendswatch-navigating-a-disrupted-future/.
 UNESCO 'Cultural and Creative Industries In the Face of COVID-19 An Economic Impact Outlook', 2021, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000377863/PDF/377863eng.pdf.multi.

generated content, social media marketing, 360-degree photography, and augmented and virtual reality experiences.¹⁴⁴

The case of **virtual reality (VR)** and augmented reality (AR) applications is one that has developed significantly during the pandemic, as these have also been utilized by museums as a means to allow engagement of audience with the institutions. One example can be seen in the case of the National Museum of Singapore, which launched an immersive installation that included three-dimensional interactive animations of history drawings and is accompanied by an AR application available for download by visitors. Additionally, the Louvre Museum in Paris developed "Mona Lisa: Beyond the Glass", which is a VR experience available both at the museum and for download which utilizes interactive design, sound, and animated images to explore the painting and its context. 147

Interestingly, the use of such digital tools by museums finds them acting as both a producer and publisher, which requires them to understand the type of rights they need to obtain from third parties in addition to protecting the intellectual property they are creating and displaying. Whilst larger and more established institutions are generally accustomed to managing the intellectual property rights associated with a variety of online media made available to members of the public, smaller institutions often lack the necessary training and resources to navigate the various rights issues.¹⁴⁸

In general, the pandemic showed a distinct gap between institutions who were able to accelerate digital strategies that were already in place or make agile changes to their programming when compared to other institutions who struggled to provide online content. In particular, a survey by ICOM showed that larger museums seem to be better equipped than small to medium-sized museums to experiment with new ways of generating income, and that museums relying mainly on earned income and private funds made more efforts to generate additional revenues when compared to museums relying on public or endowment funds. It is important to also note that digital initiative responses developed due to the pandemic were absent in most cases in African states and Small Island Developing States.

¹⁴⁴ Grant, D., 'America's virtual museums take on new significance as Covid-19 lockdown deepens' The Art Newspaper, 2020, Available at: https://www.theartnewspaper.com/2020/03/18/americas-virtual-museums-take-on-new-significance-as-covid-19-lockdown-deepens.

¹⁴⁵ Coates, C., 'How Museums are using Augmented Reality' Museum Next, 2021, Available at: https://www.museumnext.com/article/how-museums-are-using-augmented-reality/, Coates, C., 'Virtual Reality is a big trend in museums, but what are the best examples of museums using VR?' Museum Next, 2021, Available at: https://www.museumnext.com/article/how-museums-are-using-virtual-reality/.

¹⁴⁶ Coates, C., 'How Museums are using Augmented Reality' Museum Next, 2021, Available at: https://www.museumnext.com/article/how-museums-are-using-augmented-reality/, National Museum of Singapore 'Story of the Forest', 2022, Available at: https://www.nhb.gov.sg/nationalmuseum/our-exhibitions/exhibition-list/story-of-the-forest.

¹⁴⁷ Coates, C., 'How Museums are using Augmented Reality' Museum Next, 2021, Available at: https://www.museumnext.com/article/how-museums-are-using-augmented-reality/, Coates, C., 'Virtual Reality is a big trend in museums, but what are the best examples of museums using VR?' Museum Next, 2021, Available at: https://www.museumnext.com/article/how-museums-are-using-virtual-reality/.

 ¹⁴⁸ Brankov, A., 'Copyright Considerations as Art Galleries and Museums Move Online in the Wake of COVID-19' NYSBA, 2020, Available at: https://nysba.org/copyright-considerations-as-art-galleries-and-museums-move-online-in-the-wake-of-covid-19/#_edn26.
 ¹⁴⁹ Policy and Evidence Centre 'Digital Culture: Consumption in Lockdown Insights from the Consumer Tracking

¹⁴⁹ Policy and Evidence Centre 'Digital Culture: Consumption in Lockdown Insights from the Consumer Tracking Study', 2020, Available at: https://www.pec.ac.uk/assets/images/The-PEC-and-the-IPO-cultural-consumption-study-insights-from-the-six-week-study.pdf.

¹⁵⁰ International Council of Museums 'Museums, museum professionals, and COVID-19: Third Survey', 2021, Available at: https://icom.museum/wp-content/uploads/2021/07/Museums-and-Covid-19 third-ICOM-report.pdf.
¹⁵¹ UNESCO 'Museums around the world in the face of COVID-19', 2020, Available at: https://unesdoc.unesco.org/ark:/48223/pf0000373530.

It has also been noted that in many heritage institutions, for some time there has been a **distinct lack of the digital skills required to implement the necessary changes**, as well as access to the relevant training in the sector. ^{152,153} In addition, insufficient financial resources and the underdevelopment of digital infrastructure further slows down the transformation and highlights the digital divide between developed and developing countries (see figure below). ^{154,155}

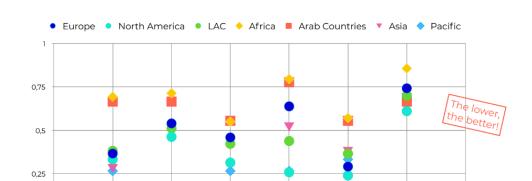


Figure 4 Digital services provided by institutions

Collection

online

Online

Exhibition

https://www.digitizationpolicies.com/medias/WMGO Presentation-PK.pdf

Live

0

Source: Going Digital, Copia di Gaballo Presentation ICOM When Museums Go Online - Online Conference, Available at:

Learning

programmes

Newsletters

Podcasts

Social

These problems were exacerbated however during the pandemic, particularly in the early stages, when museums and galleries were facing a number of challenges at the institutional level, ranging from the new rules relating to working from home, the provisions of digital access to audiences and the ability to generate revenue in an online environment. ¹⁵⁶ A study on institutions in the United States indicated that half of the institutions surveyed had either no dedicated digital staff or this role was carried out by a single individual, and that medium and large institutions were twice as likely to report digital development teams in-house when compared to smaller institutions. ¹⁵⁷ Whilst the study showed that smaller institutions do bring

in individuals to fulfil these roles, it is evident that there is a lack of capacity and skills to

¹⁵² Newman, T., et al., 'Dash Survey Results 2020 Describing the digital attitudes, skills and organizational support of people working across the UK heritage sector' Timmus Research and Heritage Fund, 2020, Available at:

https://www.heritagefund.org.uk/sites/default/files/media/attachments/DASH%20report%20draft%20v13.1.5.pdf. 153 European Expert Network on Culture and Audiovisual, 'Skills, training and knowledge transfer: traditional and emerging heritage professions', 2017, available at:

https://eenca.com/eenca/assets/File/EENCA%20publications/request%2011 final-report-on-emerging-heritage-professions-23062017.pdf

¹⁵⁴ Al Ani, A., Siebert, C., 'A Digital Transformation of Arab Museums: Challenges and Unconventional Strategies', 2021, Available at: https://www.artsmanagement.net/Articles/A-Digital-Transformation-of-Arab-Museums-Challenges-and-Unconventional-Strategies,4389.

155 Quinones Vila, C.S. 'What's in a Name? Museums in the Back Building and t

¹⁵⁵ Quinones Vila, C.S., 'What's in a Name? Museums in the Post-Digital Age' Santander Art and Culture Law Revies, 2020, Available at: https://heinonline-

org.ezproxy.hhs.nl/HOL/Page?collection=journals&handle=hein.journals/saaclr2020&type=Text&id=351.

¹⁵⁷ Knight Foundation 'Digital Readiness and Innovation in Museums: A baseline national survey', 2020, Available at: https://knightfoundation.org/wp-content/uploads/2020/10/Digital-Readiness-and-Innovation-in-Museums-Report.pdf.

advance digital programming institution-wide. 158 A study in the UK found that a skills gap also became evident in museums and heritage institutions during the pandemic, with many lacking awareness of key issues such as accessibility and copyright in particular. 159

One of the positive aspects of the pandemic in regard to museums was that the **new digital developments that had to take place to adapt to the situation offered more possibilities from an audience development perspective**. In particular, the shift to digital-only participation created the potential for new and diversified audiences to encounter museums, which was confirmed by surveys carried out in the United Kingdom and the United States. ¹⁶⁰ It also contributed towards the re-assessment of the rationale for and purpose of digital engagement for museums and a rethinking of their mission in a virtual environment. This means placing digital activities and engagement not only as a means to enhance the museum experience as a form of delivery or entertainment but also putting them at the core of museum delivery. ¹⁶¹ Digital access for museums also has been found to generate/create/produce other societal benefits and public services, access to new resources for research and education ¹⁶², and activities that promote citizens' wellbeing and mental health. ¹⁶³ However, there are some consumer categories such as small children and older people who encountered difficulties, as their virtual literacy is limited, and their online consumption often needs to be facilitated by other people around them.

It is envisioned that **COVID-19** will have a long standing and structural impact on the museum sector, with institutions addressing a number of issues that have been raised as a result of the pandemic, such as using digital tools to address the needs that became apparent during the crisis, as well as the lack of staff and digital skills training (see figure below). ¹⁶⁴

¹⁵⁸ Ihid

¹⁵⁹ Newman, T., et al., 'Dash Survey Results 2020 Describing the digital attitudes, skills and organizational support of people working across the UK heritage sector' Timmus Research and Heritage Fund, 2020, Available at:

https://www.heritagefund.org.uk/sites/default/files/media/attachments/DASH%20report%20draft%20v13.1.5.pdf.

160 Samaroudi, M., et al., 'Heritage in lockdown: digital provision of memory institutions in the UK and US of America during the COVID-19 pandemic' Museum Management and Curatorship, 2020, Available at:
https://www.tandfonline.com/doi/full/10.1080/09647775.2020.1810483.

¹⁶¹ Noehrer, L., et al., 'The impact of COVID-19 on digital data practices in museums and art galleries in the UK and the US Humanities and Social Sciences Communications', 2021, Available at: https://www.nature.com/articles/s41599-021-00921-8.

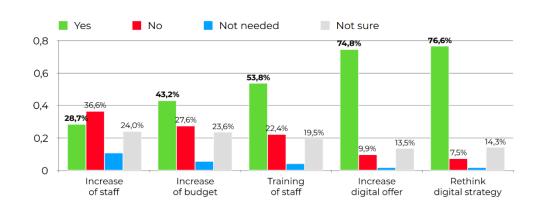
¹⁶² Agostino, D., et al., 'New development: COVID-19 as an accelerator of digital transformation in public service delivery' Public Money and Management, 2020, Available at: https://www.tandfonline.com/doi/full/10.1080/09540962.2020.1764206.

¹⁶³ Policy and Evidence Centre 'Digital Culture: Consumption in Lockdown Insights from the Consumer Tracking Study', 2020, Available at: https://www.pec.ac.uk/assets/images/The-PEC-and-the-IPO-cultural-consumption-study-insights-from-the-six-week-study.pdf.

¹⁶⁴ Newman, T., et al., 'Dash Survey Results 2020 Describing the digital attitudes, skills and organizational support of people working across the UK heritage sector' Timmus Research and Heritage Fund, 2020, Available at:

https://www.heritagefund.org.uk/sites/default/files/media/attachments/DASH%20report%20draft%20v13.1.5.pdf.

Figure 5 Changes considered by institutions following lockdown



Source: Going Digital,,Copia di Gaballo Presentation ICOM When Museums Go Online - Online Conference, available at: https://www.digitizationpolicies.com/medias/WMGO Presentation-PK.pdf

Museums will need to adapt to a new approach whereby the physical space is not the only focus, and there is exploration of additional means to utilize digital content to address issues of accessibility and inclusion, as well as to financially exploit digital content as a new source of income. The digital shift has obliged museums as well as other cultural and creative organizations to reconsider their social role with respect to the new positioning on the market and how they can attract a new target audience digitally. Glearly, museums have revealed the importance of using digital technologies as their main survival instrument. Overall, these digital activities considerably improved the relations between museums and customers and were effective in reinforcing the new concept of the participatory museum and promoting post-visit learning. Heritage organizations, memory institutions and museums in the US and UK also considered using similar approaches to digitalization as a resilient response to the COVID-19 pandemic. 167

2. LIBRARIES AND ARCHIVES

The COVID-19 pandemic had significant consequences for libraries and archives. The immediate effects of lockdowns and public health restrictions led to public, academic and school libraries temporarily closing their physical doors. For instance, the American Library Association (ALA) report suggests that the complete closure of academic library facilities became the norm as early as mid-March 2020. The International Federation of Library Associations (IFLA) reports that some countries' libraries remained closed till

¹⁶⁵ Art Fund 'Looking ahead Museum Sector Research May 2021 Summary Report', 2021, Available at: https://bigbangartfund-assets.s3.eu-west-2.amazonaws.com/downloads/looking-ahead-sector-research-report-2021.pdf.

¹⁶⁶ Raimo, N., et al., 'Digitalization in the cultural industry: evidence from Italian museums' International Journal of Entrepreneurial Behavior & Research, 2021, Available at: https://www.emerald.com/insight/content/doi/10.1108/IJEBR-01-2021-0082/full/html.

¹⁶⁷ Samaroudi, M., et al., 'Heritage in lockdown: digital provision of memory institutions in the UK and US of America during the COVID-19 pandemic' Museum Management and Curatorship, 2020, Available at: https://www.tandfonline.com/doi/full/10.1080/09647775.2020.1810483.

Hackett, T., 'E-Resources during COVID-19: copyright and licensing issues' EIFL, 2020, Available at: https://www.eifl.net/sites/default/files/resources/teresa_aflia_14_july_2020_2.pdf.

¹⁶⁹ Connell, R., et al., 'The Impact of COVID-19 on the Use of Academic Library Resources' Informational Technology and Libraries, 2021, Available at: https://ejournals.bc.edu/index.php/ital/article/view/12629.

October 2020.¹⁷⁰ However, most countries started re-opening with health and safety protocols in place. In the short term, the pandemic restricted access to publications and led to financial difficulties for libraries, writers, and publishers. IFLA and Electronic Information for Libraries (EIFL) surveys, carried out in February and March 2022, identified the main library challenges with providing access to materials and services they would be able to facilitate in physical form or within the institution premises.¹⁷¹

Faced with health emergencies, libraries reacted to crises differently. Many libraries turned to digital environments within the spirit of their core mission to provide broad and equitable access to information and knowledge. Experts have suggested that COVID-19 has accelerated the process and investment toward the digital transformation in archives and libraries. For example, there was no national e-lending ecosystem in Estonia prepandemic, but following its introduction by the Tallinn national library, the system had a significant increase. In Ireland a rise of 313% in new users of e-books and e-audiobooks services has been reported. Many libraries also expanded their digital offerings and collections, provided their librarian services remotely and turned to e-lending models. In the Netherlands, 75% of public libraries expanded their digital services. Some libraries, such as the New York Public Library or Library of Alexandria in Egypt, also started running online reading clubs or virtual events. However, in some cases initiatives were halted by a lack of appropriate equipment, reduced funds, staff, and lack of licenses for online access.

According to the Ithaca S+R US Library Survey conducted in 2020, which interviewed more than 1,693 library directors in North America, around 70% felt their library was well-prepared to pivot to virtual services. ¹⁷⁹ Similarly, according to a survey conducted by Liber Europe, more than half of surveyed libraries did not experience difficulties in providing online material due to copyright infringement, specifically when using such materials for remote purposes. ¹⁸⁰ Similar messages came also from Singapore Management University Libraries, which reported that even before the pandemic 90% of their collections were already in digital format. The libraries

¹⁷⁰ International Federation of Library Associations and Institutions (IFLA) 'COVID-19 and the Global Library Field', 2020, Available at: https://www.ifla.org/covid-19-and-the-global-library-field/.

¹⁷¹ International Federation of Library Associations and Institutions (IFLA) 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/ifla.pdf.

¹⁷² Krag, S., et al., 'Digitization in Libraries: To What Extent has Corona Given a Boost' ZBW Leibniz Information Centre for Economics, 2021, Available at: https://www.zbw-mediatalk.eu/2021/02/digitisation-in-libraries-to-what-extent-has-corona-given-a-boost/.

extent-has-corona-given-a-boost/.

173 Frederick, J., 'Academic Library Strategy and Budgeting During the COVID-19 Pandemic Results from the Ithaka S+R US Library Survey 2020' Ithaka S+R, 2020, Available at: https://sr.ithaka.org/publications/academic-library-strategy-and-budgeting-during-the-covid-19-pandemic/.

¹⁷⁴ European Bureau of Library, Information and Documentation Associations (EBLIDA) 'A European Library Agenda for the post Covid-19 Age', 2020, Available at: http://www.eblida.org/Documents/EBLIDA-Preparing-a-European-library-agenda-for-the-post-Covid-19-age.pdf.

¹⁷⁵ NAPLE 'Public Libraries in Europe and COVID-19: Findings from NAPLE Members', 2020, Available at: https://www.culturaydeporte.gob.es/dam/jcr:fce29ea1-1b83-479b-b674-a592b255f7e4/naple-narrative-report-european-library-services-during-covid19.pdf.

¹⁷⁶ KB National Library of the Netherlands 'Conference of Directors of National Libraries: Survey Impact COVID-19 Reopening the library', 2020, Available at:

https://conferenceofdirectorsofnationallibraries.files.wordpress.com/2020/07/200708-survey-impact-covid-19-reopening-def-1.pdf.

¹⁷⁷ Ibid.

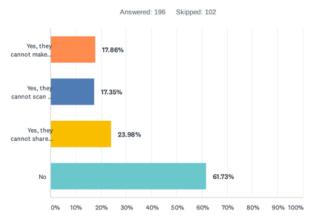
¹⁷⁸ Hinchliffe, L., and Wolff-Eisenberg, C., 'Indications of the New Normal A (Farewell) Fall 2020 Update from the Academic Library Response to COVID-19 Survey' ITHAKA S+R, 2020, Available at: https://sr.ithaka.org/blog/indications-of-the-new-normal/.
¹⁷⁹ Ibid.

¹⁸⁰ Association of European Research Libraries (LIBER) 'Covid-19 Survey Report: How Have Academic Libraries Responded to the Covid-19 Crisis?', 2020, Available at: https://libereurope.eu/wp-content/uploads/2020/12/Covid-19-Report-December-2020.pdf.

also provided courses on copyright protection to ease the use of digital materials by various stakeholders. 181

Figure 6 The Impact of Covid-19 on Research Libraries in Europe, LIBER Survey Results

Q15 Are staff and users having difficulty using digital materials, for remote purposes, because of copyright law infringement?



ANSWER CHOICES						RESPONSES	
Yes, they cannot make physical copies of printed or digital materials to use outside the library (1)						35	
Yes, they cannot scan or copy materials for online teaching (2)							
Yes, they cannot share copyright-protected content via streams or recordings of lectures (3)							
No (4)							
Total Respondents: 196							
BASIC STATISTICS							
Minimum 1.00	Maximum 4.00	Median 4.00	Mean 3.07	Standard Devi	Standard Deviation 1.11		

Source: LIBRE Survey Results, Available at: https://libereurope.eu/article/covid19-survey-research-libraries-europe/

This was not the case however in all libraries. **Those reliant on public funding experienced significant reductions in their budgets**. For example, the EBLIDA Survey on library legislation and policy revealed that in 12 of 22 European countries studied, 75% to 100% of the library's income is generated at the local level by city or regional authorities. The crisis has impacted regional budgets, and therefore, libraries may bear such consequences long-term, similarly to the financial crisis in 2008.

At the same time, some **national authorities also did not hesitate to support libraries**. In Singapore, a comprehensive Government grant package estimated at S\$55million was allocated to support culture and creative sectors, including libraries. The legislator also introduced a new copyright exemption for non-profit schools to use Internet material for educational purposes.¹⁸³ Some EU Member States have opted to use the exception under

¹⁸¹ The International Federation of Library Associations and Institutions (IFLA) 'Leaders' Conversations: Academic Libraries in the Post-COVID-19 World' October 2020, Available at: https://www.ifla.org/wp-content/uploads/2019/05/assets/asia-and-oceania/news/leaders conversation al final version 0.pdf
¹⁸² Ibid.

¹⁸³ The Intellectual Property Office of Singapore (IPOS), "Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/impact-cr-ecosystems-ipo-singapore.pdf

Article 5 of the Directive on Copyright in the Digital Single Market¹⁸⁴ on using copyrighted material for digital and cross-border teaching activities to provide academic libraries with an immediate legal framework for the extraordinary situation, while working on a more balanced and permanent solution.¹⁸⁵ Furthermore, many states recognized the impacts on libraries in crisis by creating emergency funds. For example, in the United States of America, the \$2.2 trillion Coronavirus Air, Relief, and Economic Security (CARES) Act allocated \$50 million to the libraries administered by the institute of Museum and Library Services (IMLS).

However, while the aforementioned initiatives may have been necessary to face an emergency, they also had repercussions for publishers and writers. According to the International Association of Scientific, Technical and Medical Publishers (STM), many authors, researchers, publishers, and entities in the distribution chain, such as bookshops, have suffered enormously. Similarly, according to the European Writers Council (EWC), a wide range of expanded and inexpensive licenses has firmly decreased the remuneration of writers. It also notes that out of 20 studied countries, only ten were able to respond to the crisis of self-employed writers and provide them with sufficient relief. The Council also notes that the COVID-19 pandemic has led to increased digital piracy and efforts by legal institutions in the educational and library sectors to make the work of writers and translators available online to the public at a meagre cost. 187

According to another study conducted by American Library Resources, **COVID-19 led to understaffed libraries unable to meet new digital demands**. The reduction of the general budget and public health dangers limited the number of skilled employees available to accommodate the provision of new services unaccounted for in the budgets. Furthermore, the fixed costs for libraries increased, such as scanning, shipping, delivering library material and staff training. Financial difficulties and lack of staff led to curtailing of interlibrary loans for books while cancelling drop-in services, and keeping books in quarantine. Additionally, copyright licensing regimes for the use of physical materials in online environments left libraries in an uneasy situation and the absence of license prevented them from providing digital services in many countries. ¹⁸⁹

In many cases the physical ownership of printed material does not authorize libraries to use and reproduce it online. Traditionally copyright law puts more emphasis on reproduction right protections of the copyright proprietor. ¹⁹⁰ The dissemination of material in the online environment involves reproducing the material, for example, when saving it on the cloud, whereas lending physical books does not imply reproduction, but rather distribution or communication to public, which is allowed under copyright laws. Therefore, if libraries wish to

¹⁸⁴ Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC.

¹⁸⁵ Keller, P., 'Hungary's fast tracked implementation of Article 5 CDSM directive in response to the pandemic' Institute for Information and Law, 2020, Available at: http://copyrightblog.kluweriplaw.com/2020/06/23/hungarys-fast-tracked-implementation-of-article-5-cdsm-directive-in-response-to-the-pandemic/.

 ¹⁸⁶ International Association of Scientific, Technical and Medical Publishers (STM) 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/impact-cr-ecosystems-international-association-of-scientific-technical-and-medical-publishers.pdf.
 187 European Writers Council (EWC) 'Request for contributions for the information session on the impact of the

¹⁸⁷ European Writers Council (EWC) 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at:

https://www.wipo.int/export/sites/www/meetings/en/docs/impact-cr-ecosystems-european-writers-council.pdf.

188 Machovec, G., 'Pandemic Impacts on Library Consortia and Their Sustainability' Journal of Library Administration, 2020, Available at: https://www.tandfonline.com/doi/full/10.1080/01930826.2020.1760558.

189 Ibid.

¹⁹⁰ Giuseppe Vitiello 'The Economic Foundation of Library Copyright Strategies in Europe' European Bureau of Library, Information and Documentation Associations, 2021, Available at: https://liberquarterly.eu/article/view/10883/11894#info

lend online materials this usually means that they must acquire a separate license or authorization from the copyright owner, rather than digitize their printed copies.

Additionally, different copyright regimes also regulate the rights acquired by libraries to use eresources. When acquiring e-resources, libraries receive a license instead of ownership, with terms set by the contractual conditions in a licensing agreement. The license terms vary in different countries, for instance they may include the one-copy-one-user model, hybrid payper-loan/simultaneous-use models or different models. 191 Any further dissemination may violate copyright owners' exclusive rights, and therefore, libraries must specifically negotiate for additional reproduction and distribution rights, which would allow digital lending. The conditions may restrict the number of permitted distributions and users and often the licenses must be renewed annually.

Some libraries without online licensing arrangements were limited to provision of physical materials. For example, in Germany, according to Deutscher Bibliothekverband, libraries aimed to provide online access to their catalogues. However, they were **precluded by legislation to share their inventory outside library terminals or university networks without additional license agreements**. Firstly, according to § 60e Abs. 4 UrhG libraries may by default make work from their holdings available only through their internal networks, and any further dissemination without license will constitute violation of copyright laws. Secondly, the law prohibits libraries from including newspapers in digital education and their delivery services. Similarly, in South Africa 193, converting printed material to e-material without a license violates the law, although all physical library resources are acquired and distributed legally.

Additionally, as libraries need to negotiate additional rights, such contracts are more expensive and time-consuming. Library consortia, which are networks of libraries either state-funded or supported by membership fees and licensing, have a crucial role, especially in regard to negotiating such contracts for licensing of e-resources. ¹⁹⁴ The consortia – most of the time state agencies or nonprofit-corporations - are dependent on public funding and the overhead from licensing to support their activities. Therefore, **the COVID-19 pandemic could have even more crippling consequences in the long term for library consortia.** The survey conducted by ALA in all types of libraries in May 2020 revealed that the majority of academic libraries had already lost funding or anticipated losing financing within the next year for staff, new hires, professional development, print collections, programs, and services. ¹⁹⁵ In a survey conducted by Liber Europe, one-third of respondents indicated that they expect budget cuts in the future. ¹⁹⁶

However, the struggle of some libraries in providing e-services must be contrasted with authors and publishers' perspectives. More stringent copyright protection regimes for digital resources stem from a need to protect and incentivize the hard work and creative expression of authors. Such regimes also allow publishers to invest in authors and serve the public interest by making literature, peer-reviewed research, and educational learning solutions available to

¹⁹¹ Ibid.

¹⁹² Deutscher Bibliotheksverband e.V. (dbv) 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at:

https://www.wipo.int/export/sites/www/meetings/en/docs/impact-cr-ecosystems-deutscher-bibliotheksverband.pdf.

193 Mukeredzi, T., 'COVID-19 prompts calls for library-friendly copyright laws' University World News: African Edition, 2020, Available at: https://www.universityworldnews.com/post.php?story=2020112313502493.

¹⁹⁵ Connell, R., et al., 'The Impact of COVID-19 on the Use of Academic Library Resources' Informational Technology and Libraries, 2021, Available at: https://ejournals.bc.edu/index.php/ital/article/view/12629.

¹⁹⁶ Ibid

consumers, scientists, educators, students and other readers. 197 Books and other digital material are not self-generated and their dissemination in the digital environment endangers control over lawful use, consequently limiting artistic expression and livelihoods of authors. Firstly, according to the WIPO global publishing industry survey among 31 countries, the pandemic led in most countries to a decline in the number of titles published compared to the previous year. 198 Furthermore, as reported by Germany's publishers and booksellers' association, the e-lending market grew six times faster than e-book sales, which presents an existential problem for authors and publishers, who receive substantially lower remuneration for lending than for sales. 199

On the positive side, there are also examples of successful initiatives which proved that all actors in the industry - authors, translators, publishers, libraries and public authorities - shared the same objective of providing access to information and to that end joined their forces to fight the pandemic. The pandemic brought the actors in the industry closer and showed the resilience of the sector. For instance, according to an International Federation of Reproduction Rights Organizations (IFFRO) survey more than 50% of their members cooperated with authors and publishers to expand their licenses or create entirely new licenses to enable remote work and learning.²⁰⁰ Furthermore some libraries showed that with proactivity and preparedness from the beginning of the pandemic, the effects of pandemic could be eased. For instance, Nazarbayev University in Kazakhstan provided financial resources for the procurement of e-books, subscriptions to international databases and the development of virtual services.²⁰¹

Likewise, publishers did not remain ignorant of the crisis and aimed to ease the transition to digital environments for libraries. In immediate response to the pandemic some publishers also provided free access to peer reviewed publications and over time more than 32,000 articles, chapters and other resources have been made available for the duration of the crisis.²⁰² Additionally in a response to the shutdown of libraries, according to the statement of the International Coalition of Library Consortia on the Global COVID-19 pandemic and its Impact on Library Services and Resources, 203 they made their copyrighted works accessible to the public by waiving restrictions on concurrent access, allowing remote access and lifting the paywalls to COVID-19 related content. Some publishers unlocked books regardless of whether the libraries held copies of their printed versions; for example, Cambridge Press provided access to more than 700 books this way. 204 Taylor & Francis and Routledge

covid19/

¹⁹⁷ International Publishers Association 'IPA underlines publishers' contribution during COVID pandemic at WIPO Copyright Committee' 2021, Available at: https://www.internationalpublishers.org/copyright-news-blog/1109-ipaunderlines-publishers-contribution-during-covid-pandemic-at-wipo-copyright-committee#SCCR41JBENG ¹⁹⁸ WIPO 'World Intellectual Property Indicators 2021' WIPO, 2021, Available at: https://tind.wipo.int/record/44461 ¹⁹⁹ Anderson 'Germany's First Half of 2021: Ebook Dynamics, and Libraries', Publishin Perspectives, 2021, Available at: https://publishingperspectives.com/2021/09/germany-first-half-in-2021-demand-for-ebooks-rises-

²⁰⁰ International Federation of Reproduction Rights Organisations 'IFRRO Members respond to the pandemic' 2021, Available at: https://mailchi.mp/94f7c408f854/ifrro-news-covid19-1389459

²⁰¹ The International Federation of Library Associations and Institutions (IFLA) 'Leaders' Conversations: Academic Libraries in the Post-COVID-19 World' October 2020, Available at: https://www.ifla.org/wpcontent/uploads/2019/05/assets/asia-and-oceania/news/leaders conversation al final version 0.pdf

²⁰² International Association of Scientific, Technical and Medical Publishers (STM) "Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/impact-cr-ecosystems-international-association-ofscientific-technical-and-medical-publishers.pdf

²⁰³ International Coalition of Library Consortia 'Statement on the Global COVID-19 Pandemic and Its Impact on Library Services and Resources', 2020, Available at: https://www.icolc.net/statements/statement-global-covid-19-<u>pandemic-and-its-impact-library-services-and-resources.</u>

204 Association of American Publishers (AAP) 'What Publishers Are Doing to Help During The Coronavirus

Pandemic', 2020, Available at: https://publishers.org/aap-news/covid-19-response/.

announced upgrades of single-user licenses to unlimited user licenses for the duration of the lockdown.²⁰⁵

Public authorities and other stakeholders adapted similar strategies. The Japanese government implemented the amended Japanese Copyright Act (2018) in April 2020, introducing a compensation scheme so that teachers could use works in online lessons without permission of copyright owners, to meet needs for remote education due to COVID-19. This use was free as a special measure until March 31, 2021. ²⁰⁶ In other countries, such as Australia, the Government proposed reforms to simplify and update Australia's copyright laws to better support and align the use of copyright material in physical and digital environments, while copyright holders continue to be fairly remunerated for the use of their material.

In this context, it is worth noting the Australian Storytime Agreement reached between the Australian schools' sector and the Australian Publishers Association and Australian Society of Authors. This agreement, which is an industry-led solution, allows teachers to read Australian children's book to students and their families in a virtual environment during the COVID-19 lockdown, either via livestreaming or making temporary recordings of the storytime available online to view.²⁰⁷ Finally, some IP Offices continued their work with members of communities with disability, focusing on finalizing the amendments to the Copyright Act to incorporate all the provisions from the Marrakesh Treaty to facilitate Access to Published works for Persons who are Blind, Visually Impaired, or Otherwise Print Disabled.²⁰⁸

However, in some countries such as South Africa and Zimbabwe²⁰⁹ e-resources had some restrictions (some could only be viewed online, could only be downloaded one page at a time or could not be printed in hard copy, etc.), impacting particularly poor and rural areas of the globe. To face such research issues, some libraries continued to provide online reference services through WhatsApp, email, and website chat references services. Although the digital environment was accelerated by the pandemic, there were also negative effects tied to it. The eBook platform DawsonEra, with whom many Francophone publishers contracted to exclusively host their content, went bankrupt in summer 2020, which threatened to render inaccessible a substantial amount of its content before other platforms offered to host it. Moreover, IFLA's survey stressed the lack of availability of French-languages eBooks.²¹⁰

Some experts suggest that the COVID-19 pandemic will incentivize libraries to take more proactive steps in facilitating online uses, if possible under licensing and/or exceptions in

²⁰⁵ Association of European Research Libraries (LIBER) 'Research Under Pressure: Impact of Covid-19 Through A Librarian's Eyes', 2020, Available at: https://libereurope.eu/article/research-under-pressure-impact-of-covid-19-through-a-librarians-eyes/.

²⁰⁶ Agency for Cultural Affairs, Government of Japan 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/agency-for-cultural-affairs-government-japan.pdf.

²⁰⁷ Arts COVID Recovery and Response Team, Department of Infrastructure, Transport, Regional Development and Communications, Australian Government 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/arts-covid-recovery-and-response-team-australian-government.pdf.

²⁰⁸ Jamaica Intellectual Property Office 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/jamaica-intellectual-property-office.pdf.

²⁰⁹ EIFL.net (Electronic Information for Libraries) (WIPO material), https://www.zimlive.com/2020/05/23/students-challenge-exclusionary-university-elearning/#inbox/ blank

²¹⁰ International Federation of Library Associations and Institutions (IFLA) 'Request for contributions for the information session on the impact of the Covid-19 pandemic on the copyright ecosystem' WIPO, 2022, Available at: https://www.wipo.int/export/sites/www/meetings/en/docs/ifla.pdf.

national laws. 211 Many countries do not have such provisions or face practical inefficiencies in applying for such exemptions in a digital environment. 212 However, there are some examples of where this is the case. For example, in the United States, the fair use doctrine allows, under certain circumstances, the use of copyrighted material for educational purposes. The HathiTrust Digital Library initiated the Emergency Temporary Access Service (ETAS), providing its institutional partners with the full text of millions of volumes, precisely under this doctrine. ETAS enables all libraries, which suffer 'unexpected or involuntary, temporary disruption to normal operations', to access the service. 213 After two months of service provision, HathiTrust reported over 2,200 unique users accessing about 3,800 unique items, reading roughly 50 pages online. 214 While providing access, the ETAS access contains a number of conditions in order to comply with the Fair Use doctrine in the United States, for example: 1) service available only to Hathi Trust partner institutions and their faculty, staff, and students; 2) work to be accessed must be in member library's collection; 3) access to work only available to the student, staff, faculty designated by the partner institution, when logged into Hathi Trust system. The user, when logged in to Hathi Trust system through his/her institutional library can only read the work online, downloads not permitted.²¹⁵

Furthermore, the report on the assessment of the service suggested that there is **considerable potential for the use of University of California's collectively held in-copyright print collections** outside of an emergency context under fair-use terms, for example, in support of humanities research teaching and learning activities. Similarly, some experts call for international commitment to change to **open access models**, especially in educational settings of academic libraries, allowing dissemination of digital copyrighted material. The issue remains to find a suitable and well-balanced approach considerate of libraries, publishers, writers and affiliated entities, with specific consideration of access to knowledge during public health emergencies but also consideration of protection of copyrighted works.

The consequences of the COVID-19 pandemic for national and public archives were similar to those for libraries: due to the lockdowns and public health restrictions they temporarily closed their physical doors and had to postpone physical events. As a study shows, as an initial response to the crisis at its commencement, several announcements were made by leading national archival institutions in their respective countries. Although these institutions operate in diverse contexts, all the announcements thematically converge in discussing the closure of physical locations and spaces, as well as maintaining (reduced) services and offering remote access.²¹⁸

On different note, the pandemic has also reiterated archives' role in documenting, preserving, and learning from the effects of pandemic, especially in supporting efficient decision-making

²¹¹ Benson, S., 'Fair Use During the COVID-19 Quarantine' Scholarly Communication and Publishing, 2020, Available at: https://www.library.illinois.edu/scp/podcast/fair-use-during-the-covid-19-quarantine/, Ibid.

²¹² Craig, C., 'Copyright limits and learning: lessons from the covid-19 quarantine' Education International, 2020, Available at: https://www.ei-ie.org/en/item/23590:copyright-limits-and-learning-lessons-from-the-covid-19-guarantine-by-carys-craig.

²¹³ HathiTrust, 'Emergency Temporary Access Service', available at: https://www.hathitrust.org/ETAS-Description
214 Kathryn, S., et al., 'UC HathiTrust ETAS Assessment - Summative Report to CoUL' HUC HathiTrust ETAS Liaisons group, 2021, Available at: https://escholarship.org/uc/item/8vh1k54f.

²¹⁵ https://www.library.illinois.edu/scp/podcast/mike-furlough-explains-the-hathitrust-emergency-temporary-access-service/

²¹⁶ Poole, N., 'Copyright and enabling remote learning and research during the Covid-19 crisis' CILIP The Library and Information Association, 2020, Available at: https://www.cilip.org.uk/news/498055/Copyright-and-enabling-remote-learning-and-research-during-the-Covid-19-crisis-.htm.

²¹⁷ Ibid

²¹⁸ IFLA, 'COVID-19 and the Global Library Field', 2020, available at: https://www.ifla.org/covid-19-and-the-global-library-field/

in the future.²¹⁹ The pandemic however presented a threat to archival heritage because it made archives more vulnerable to financial collapse, disturbed the delivery of public services and information legislation, and exposed to failure those archive services unable to accelerate the transition to digital.²²⁰ **Firstly, archives reported difficulties in the collection of physical materials** specifically in closed physical premises during early stages of pandemic, which halted their archiving efforts, because they were concerned about health and safety of staff and donors.²²¹

Secondly, the digital transformation has also been accelerated in archives. ²²² For instance, the Cumberland County Historical Society in Pennsylvania USA developed a digital archive 'Cumberland County during COVID-19: Archiving History as it Happens' to gather experiences and support of local community adjusting to new ways of life. ²²³ According to the survey conducted by LIRASIS through multiple archival organizations in the US 73% of institutions decided to collect digital materials, with the hardest challenge being their preservation. The statement by the International Conference of Information Commissioners and aligned organizations reinforced that while preservation of digital materials may be at risk due to fast emergence of information and changed ways of working in times of pandemic, the duty to document those events becomes more essential than ever. ²²⁴

Web-archiving emerged as one of the only immediate responses to preserve historical timelines. However, some archives that intended to collect pandemic-related web-content were overwhelmed by accelerated generation of information and limited web harvesting capacities. Those challenges also incentivised them to develop collecting strategies and consequently improve their archiving capacities. For instance, the Library of Congress initially faced such challenges but, in a response, developed a project "Coronavirus Web Archive" aiming to have a well-balanced collection of archived pandemic-related websites that will be preserved and made accessible to users. Similarly, the National Archives in the UK noted that while the pandemic changed the current context of their work, they will continue to innovate to meet the changed demands of their audiences. 227

Various governments and institutions supported archives during the crisis through financial or informational measures. For instance, UNESCO's Memory of the World program developed an initiative to support their member countries and memory institutions in securing and preserving the records related to the pandemic. The website "Resources for Documentary Heritage Professionals" includes an overview of good practices and resources to which

²¹⁹ Jaros 'In the Moment: Archiving Daily Life in a Pandemic' Institute of Museum and Library Services, 2020, Available at: https://www.imls.gov/blog/2020/05/moment-archiving-daily-life-pandemic

The National Archives 'Written evidence submitted by The National Archives: Executive summary: Impact of COVID-19 on the archive sector' 2021, Available at: https://committees.parliament.uk/writtenevidence/7028/pdf/
 Klettlinger, et. al 'Collecting archival materials during the COVID-19 pandemic', LYRASIS, 2020, Available at: https://www.lyrasis.org/programs/Documents/Pandemic-Survey-Report-2020.pdf

²²² Tebeau 'A Journal of the Plague Year: Rapid-Response Archiving Meets the Pandemic' Arizona State University, 2021, Available at: https://doi.org/10.1177/1550190620986550

²²⁴ International Conference of Information Commissioners and aligned organisations 'COVID-19: The duty to document does not cease in a crisis, it becomes more essential.'2020, Available at: https://www.ica.org/sites/default/files/covid_the_duty_to_document_is_essential.pdf

²²⁵ Library and Archives Canada 'Documenting the COVID-19 Pandemic' 2022, Available at: https://www.bac-lac.gc.ca/eng/about-us/about-collection/Pages/documenting-2020-covid-19-pandemic.aspx

²²⁶ Tucker 'Library's Web Archiving: COVID-19 Challenges', The Library of Congress, 2020, Available at: https://blogs.loc.gov/loc/2020/12/librarys-web-archiving-covid-19-challenges/

²²⁷ The National Archives 'The National Archives' strategic response to COVID-19' 2021, Available at: https://www.nationalarchives.gov.uk/about/our-role/plans-policies-performance-and-projects/our-plans/the-national-archives-strategic-response-to-covid-19/

archives can refer when developing their pandemic strategies.²²⁸ Furthermore, the International Council on Archives developed a digital map where archives can share their current projects and activities. This initiative can help archives to learn from peer practices as well as reach the wider community of donors.²²⁹ A number of heritage institutions in the Netherlands are working on collecting and preserving sources related to the coronavirus. In addition, the organizations are striving to create a "Coronavirus Collection": the digital story of the Coronavirus in the Netherlands at their local or regional level. The Amsterdam City Archives, like other organizations, makes use of "hot spot lists", lists that can be used to select events and issues that have a major impact on society²³⁰.

3. EDUCATION AND RESEARCH

The COVID-19 pandemic has **disrupted all levels of education provision with the temporary physical closures of schools and education institutions around the world**. In 2020, it was reported that the disruption of education systems was affecting nearly 1.6 billion students in more than 190 countries and in all continents, impacting 94% of the world's student population and 99% in low and lower-middle income countries. ²³¹ Across the globe, the immediate response to the temporary physical closure of schools was to utilize online and distance learning. The International Association of Universities (IAU) survey data shows that 75% of higher education institutions worldwide had replaced in person teaching by remote teaching by April 2020. ²³²

Although many countries utilized this shift, issues of equity, infrastructure, broadband capacity, pupil equipment and pedagogic capacity immediately emerged as a consequence. ²³³ This was particularly evident in South America. ²³⁴ While education processes have continued remotely, using digital or traditional means (such as TV or radio), the effects of the digital gap have been amplified in the case of rural and lower-income populations, which have lower access to connectivity and lower skills to take advantage of this type of technology. A survey by the University of Chile showed that in comparing the results of the respondents (teachers) who taught in a private or public school, there were more difficulties for teachers in the latter in relation to handling software for remote learning, having access to computer equipment, and having a stable internet connection. ²³⁵ Despite efforts by the authorities, the prolonged health crisis will have long-term consequences on these generations of students. There will be delays and an increase in learning achievement gaps that will be hard to recover in the short term. The loss of learning due to lack of attendance is estimated

²²⁸ UNESCO 'Resources for Documentary Heritage Professionals' 2022, Available at: https://en.unesco.org/covid19/communicationinformationresponse/documentaryheritage
²²⁹ International Council on Archives 'Archives are Accessible - Search the Map !' 2022, Available at:

https://www.ica.org/en/what-archive/archives-are-accessible-search-the-map amsterdam Stadsarchief, 'Digitaal archief over het coronavirus', 2022, Available at:

https://www.amsterdam.nl/stadsarchief/nieuws/corona-archief/

²³¹ UN 'Policy Brief: Education during COVID-19 and beyond', 2020, Available at: https://unsdg.un.org/resources/policy-brief-education-during-covid-19-and-beyond.

European Commission 'The impact of COVID-19 on higher education', 2021, Available at: https://op.europa.eu/en/publication-detail/-/publication/876ce591-87a0-11eb-ac4c-01aa75ed71a1/language-en.

²³³ World Bank 'The COVID-19 Crisis Response: Supporting tertiary education for continuity, adaptation, and innovation', 2020, Available at: https://documents1.worldbank.org/curated/en/621991586463915490/The-COVID-19-Crisis-Response-Supporting-Tertiary-Education-for-Continuity-Adaptation-and-Innovation.pdf.

²³⁴ Economic Commission for Latin America and the Caribbean (ECLAC) 'The recovery paradox in Latin America and the Caribbean Growth amid persisting structural problems: Inequality, poverty and low investment and productivity' UN, 2021, Available at: https://www.cepal.org/en/insights/challenges-and-opportunities-secondary-education-latin-america-and-caribbean-during-and.

education-latin-america-and-caribbean-during-and.

235 Universidad de Chile 'COVID-19 Nuevos Contextos, Nuevas Demandas y Experiencia Docente en Chile', 2020, Available at: http://eduinclusiva.cl/wp-content/uploads/2020/10/CIAE-COVID-VFinal-1.pdf.

at up to a year of schooling.^{236, 237} For example, the survey by the University of Chile shows that the participation of students dropped by 14% in public schools.²³⁸ School dropout is therefore another important consequence of the pandemic.

In facilitating the shift to online means, higher education institutions have employed five major actions as identified by the World Bank: acting in the short term (such as using video conferencing and creating help desks) and the medium term (strengthening national and institutional capacity), mobilizing widely used and readily available and scalable resources, setting up a shop or resources for students and faculty, curating existing content and gathering feedback on its usefulness as it rolls out, and lastly, communicating with faculty and students to provide comfort and guidance. Nevertheless, the universal experience with the disruption to higher education and shift to purely online methods has exposed a number of **significant short and long term challenges for educational institutions.** These include diminished resources for institutions, personal and academic challenges for both institutions and students, demand for improved infrastructure to support distance and hybrid learning models, increased inequity/inequality in access and retention to education, loss of research, including research collaborations across institutions, borders, and disciplines, and much more. 240

As countries began to see lower amounts of new COVID-19 cases among their population, many governments began to loosen restrictions and re-open schools. In these cases, countries have opened up schools and colleges, only to close them again after a resurgence of the virus. Such successive closures and re-openings are likely to continue as the virus continues to circulate. Some countries seem to be employing a hybrid or mixed model of education provision, while other countries are significantly reducing class sizes or providing lessons outside. ²⁴¹

In relation to the challenges the COVID-19 pandemic posed for the copyright framework, though the crisis has aggravated these challenges, it is worth noting that this is part of a longstanding debate especially in education. ²⁴² Copyright plays an integral role in education, as it exists in textbooks, library collections, scholarly articles, online lectures, presentations, and research databases.

One of the main challenges is the difference in use of copyright protected material in online and offline teaching settings. E-resources usually contain a publisher license that sets out how the content should be used and may restrict remote access and online use. Teachers and students may incur risks when sharing materials without the right holder's authorization of a particular source, more specifically, teachers who share materials with students are more likely to infringe on rights holders' exclusive right to reproduce and the right to communicate their work to the public.²⁴³ While copying protected material for educational

²³⁶ Ibid.

²³⁷ Ibid

²³⁸ Universidad de Chile 'COVID-19 Nuevos Contextos, Nuevas Demandas y Experiencia Docente en Chile', 2020, Available at: http://eduinclusiva.cl/wp-content/uploads/2020/10/CIAE-COVID-VFinal-1.pdf.

²³⁹ World Bank 'The COVID-19 Crisis Response: Supporting tertiary education for continuity, adaptation, and innovation', 2020, Available at: https://documents1.worldbank.org/curated/en/621991586463915490/The-COVID-19-Crisis-Response-Supporting-Tertiary-Education-for-Continuity-Adaptation-and-Innovation.pdf.

²⁴⁰ Ibid.

²⁴¹ UN 'Policy Brief: Education during COVID-19 and beyond', 2020, Available at: https://unsdg.un.org/resources/policy-brief-education-during-covid-19-and-beyond.

²⁴² Hudson, E., and Wragg, P., Proposals for copyright law and education during the COVID-19 pandemic' NILQ, 2020, Available at: https://nilq.qub.ac.uk/index.php/nilq/article/view/917/746.

²⁴³ Pascault, L., et al., 'Copyright and Remote Teaching in the Time of Covid-19: A Study of Contractual Terms and Conditions of Selected Online Services European' Intellectual Property Review, 2020, Available at:

purposes is not a new phenomenon, the sudden shift in reliance on digital copies due to the pandemic has intensified the need for access to new levels and escalated the urgency of ensuring affordable access to educational resources.²⁴⁴ In Canada for example, the Copyright Act contains exceptions for reading in public, for education and training (including lessons communicated online), and a defense for the purposes of education or private study.²⁴⁵

With the increased reliance on digital counterparts, another significant challenge faced by educational institutions when entering into digital licensing agreements is that if such licensing is either unavailable or prohibitively expensive, then access and use of materials is simply not possible.²⁴⁶ EIFL argues that in the United Kingdom for example, only 10% of academic titles are available in electronic format, not to mention there are restrictions on printing and downloading resources as well.²⁴⁷ Also in the United Kingdom, many educational institutions have obtained license from right owners. The United Kingdom Copyright Licensing Agency provides an Education Platform that has over 5,000 teachers registered and 2,730 schools with registered users. In terms of higher education, CLA also offers the Digital Content Store with 124 Institutions currently using the system representing 62% of full-time equivalent higher education students in the United Kingdom. ²⁴⁸

In response, to enable teaching activities to continue during physical school closures, many publishers provided access to content for existing customers (such as textbooks) and provided COVID-19 related content to be openly available. This access offered by publishers is temporary, depending either on certain dates of expiry, end of semesters, or when the COVID-19 pandemic ends. Academic libraries also attempted to lift licensing restrictions. For example, in March 2020, the International Coalition of Library Consortia (ICLC) requested vendors to lift many licensing restrictions for students affected by school and library shutdowns. Yet, despite the increased access to online collections as a result, library resource use was still disrupted, as many students and faculties still use printed material. 249 Some universities have conducted rapid measures to support the necessary move to online learning and access of printed material, particularly by implementing reading lists. Namely, the Libraries and Cultural Resources at the University of Calgary implemented the Ex Libris' reading list solution. Leganto, which gave the university much needed support in online teaching and learning. 250 The Leganto reading list allows libraries to streamline access to course materials, whilst reducing their cost to students, by making use of library collections, librarian's expertise and library services. Moreover, instructors can build lists of resources that include all material types and students can access all course materials in one place from any device. 251

https://www.researchgate.net/publication/342961277 Copyright and Remote Teaching in the Time of Covid-19 A Study of Contractual Terms and Conditions of Selected Online Services.

²⁴⁴ Craig, C., 'Copyright limits and learning: lessons from the covid-19 quarantine' Education International, 2020, Available at: https://www.ei-ie.org/en/item/23590:copyright-limits-and-learning-lessons-from-the-covid-19-<u>quarantine-by-carys-craig.</u>

245 Craig, C., 'Copyright limits and learning: lessons from the covid-19 quarantine' Education International, 2020,

Available at: https://www.ei-ie.org/en/item/23590:copyright-limits-and-learning-lessons-from-the-covid-19quarantine-by-carys-craig.

²⁴⁶ Craig, C., "An Hundred Stories in Ten Days": COVID-19 Lessons for Culture, Learning, and Copyright Law' Osgoode Hall Law School of York University, 2021, Available at:

https://digitalcommons.osgoode.yorku.ca/cgi/viewcontent.cgi?article=3600&context=ohlj.
²⁴⁷ Hackett, T., 'Covid lessons - copyright and online learning' EIFL, 2020, Available at: https://www.eifl.net/blogs/covid-lessons-copyright-and-online-learning.

²⁴⁸ Briefing Pack How CLA Supports the UK Education Sector, Copyright Licensing Agency, May 2020

²⁴⁹ https://ejournals.bc.edu/index.php/ital/article/view/12629/10383

²⁵⁰ https://ejournals.bc.edu/index.php/ital/article/view/13209/10493

²⁵¹ https://exlibrisgroup.com/products/leganto-reading-list-management-system/

The impact of COVID-19 on the research sector has resulted in both short- and longterm consequences. Most academic, industry, and governmental basic sciences and clinical research was either cut back or redirected to research on COVID-19.²⁵² Many clinical trials were halted, except those testing life-saving therapies, and ongoing trials shifted to enable virtual monitoring to minimize contact between people. The suspension of research activities has caused further reduction in the recruitment of research subjects and a delay in data entry into clinical trial databases, and research staff hiring has been suspended due to travel and funding restrictions.²⁵³ Access to research information has also been hampered, with the reduced access to libraries and few resources having digital versions. While the discussion about open access has certainly been revived by the crisis, the adoption of this model would require investment in supporting the digital infrastructure to make this accessible/downloadable, and consideration to business models.²⁵⁴ Nevertheless, throughout the pandemic, publishers have reacted strongly in allowing open access journals and supporting both researchers and the public. For example, the International Association of Scientific, Technical and Medical Publishers (STM) has worked together with its members and other publishers to provide free access to relevant peer reviewed publications, to ensure that throughout the pandemic research and data quickly reaches the widest possible audience. 255 Furthermore, in response to the pandemic, SAGE Publishing supported teachers, librarians and researchers by offering free access to eTextbooks, courseware, and a range of articles and resources on online teaching, offering complimentary, 90-day access to librarians interested in providing SAGE Video, SAGE Research Methods Video, and SAGE Knowledge Books and Reference to their faculty and students, and removing the subscription gateway to articles related to COVID-19 and its impact.²⁵⁶

Due to the pandemic and the reliance on electronic material, **some stakeholders called for new approaches on the legal framework in delivering education and science**. For example, the Association of Research Libraries (ARL) in Europe called upon the European Commission and EU Member States to issue urgent guidance to ensure that educational institutions, researchers, and libraries are able to fulfil their obligations without the fear of litigation, emphasizing the need for the public interest during crises such as COVID-19. While publishers have waived fees to certain publications as a response to the COVID-19, open access models have been promoted long before the start of the pandemic, especially in the Global South. For example, Diamond Scientific Publishing is a publisher of peer reviewed and fully open access journals for the public, using the diamond open access model. According to them, following the guidelines under the liberal copyright license, the open access model would eliminate barriers and permit researchers to make use of digital resources in innovative means, such as including practices like meta-analysis and text mining. ²⁵⁸ In 2021, around 29,000 scientific journals relied on diamond open access, and they make up for 73% of the

Weiner, D., et al., 'COVID-19 impact on research, lessons learned from COVID-19 research, implications for pediatric research' Pediatric Research, 2020, Available at: https://www.nature.com/articles/s41390-020-1006-3. Harper, L., et al., 'The impact of COVID-19 on research' Journal of Pediatric Urology, 2020, Available at: https://www.ipurol.com/article/S1477-5131(20)30412-5/fulltext.

²⁵⁴ Fosci, M., et al., 'Emerging from uncertainty: International perspectives on the impact of COVID-19 on university research' Springer Nature, 2020, Available at: https://figshare.com/articles/online resource/Emerging from uncertainty International perspectives on the impact of COVID-19 on university research/13130063.

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journals registered in the Directory of Open Access Journals.²⁵⁹ The Scientific Electronic Library Online (SciELO) and Redalyc are other databases utilizing open access, first established in 1997 and 2002 in Latin America respectively. In 2021, Africa and Latin America had agreed to closer collaboration around open science.²⁶⁰ As most major and large commercial publishers are based in North America and Western Europe, there is a dominance of using article processing charge (APC) based journals rather than open access models.²⁶¹ Due to the direct impacts of COVID-19 however, there seems to be a move to the open access direction, as seen by the European Commission's promotion of the "Share Research Knowledge System" by 2030 to curb the pandemic and open up science and knowledge. ²⁶² Additionally in Australia, the issue of open access is expected to be placed on the national agenda.²⁶³

Springer Nature proposes several **ideas to support access to academic research materials**, **emphasizing open access and open science** for research.²⁶⁴ It proposes that stakeholders should look at the transition from subscriptions to pay-to-publish, as libraries face several budget implications of their subscription agreements. This would guarantee open access to scholarly communication without compromising the quality of such publications.

Higher education is already facing intense scrutiny over a myriad of issues, such as rising costs for students, skill gaps for graduates and post-graduation unemployment rates. Moreover, with the challenges faced due to COVID-19, online learning and teaching platforms were prompting students to reconsider what defines a degree. With the reassessment of academic models due to the pandemic, higher education institutions now have the opportunity to implement structural changes to address several issues seen before and after the rise of COVID-19. For example, educational institutions can employ online learning platforms to provide students with a personal learning cloud, which can deliver the equivalent of many on campus bachelor's and master's degrees at lower costs. Educational institutes have further incentive to make use of these personal learning clouds with hybrid or online study models. facilitating access to a wider array of students around the world.²⁶⁵ Moreover, some experts have challenged the model of competition between universities, stating that as centers of research and learning, higher education institutions need to be better at collaborating with one another and must let go of the competitive behavior that has created disparities between higher education around the world. As a result of the pandemic, they recommend that global cooperation in higher education and research should be the norm with the move to online digital learning, as well as enhanced networks for higher education in the Global South to facilitate local knowledge to train people with globally relevant, research-based education.²⁶⁶

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PART III: CONCLUSIONS

Within every crisis, there is opportunity. The COVID-19 pandemic has been a catalyst for many changes around the world, both positive and challenging, but the survival of institutions will depend on how they can weather this emergency situation. All countries around the world took whole-of-economy measures, and specifically focused on cultural and creative sectors to support creators, institutions and in some cases audience as well. The COVID-19 pandemic is likely to have profound and lasting structural effects on how culture is produced and enjoyed as well as how education and research are undertaken.

The analysis of reports produced by national and international organizations, academic articles, books and newspaper articles as well as exchanges with experts, clearly demonstrated that the COVID-19 pandemic has had a profound effect on cultural and creative industries worldwide. However, the current crisis has revealed a **serious lack of consistent and equal response capacity across the sectors in both developing and developed countries**.

To survive in this difficult environment, **stakeholders needed to react rapidly and develop new, more resilient ways of functioning**. The rapid implementation of digital tools in their functioning during the COVID-19 pandemic (on-line tours, exhibitions for museums, etc.) enabled some institutions to partially overcome the closed doors. The switch to the online context was easier for some organizations due to the nature of their activity and the presence of investments to accomplish the digital shift or by the fact that the digital shift was already part of their program of development, therefore the pandemic just accelerated its implementation.

For example, digital technologies allowed museums to explore new ways of involving visitors by increasing their social media activity and providing online access options to attend the museum, as well as online tours.

Small and medium scale institutions and businesses were struggling to adapt in this emergency situation, and they needed aid to develop the necessary skills and resources to face the challenging context and satisfy the new needs. Without adequate financial relief measures, the COVID-19 will still have major repercussions, where applicable, in terms of reduced operational capacity, affecting opening hours, exhibitions and public programs. This will have further negative consequences on business models, the future of creative industries and the access to culture, depletion of cultural opportunities and, ultimately, the well-being of the communities these institutions serve.

As discussed in Part I, the flexibility, the adaptability combined with the digital capabilities of creative organizations were fundamental components of resilience strategies for the COVID-19 pandemic.

As discussed in Part II, closed premises during the pandemic and **the process of significantly expanding their e-catalogue have introduced financial difficulties for libraries** that got only amplified by regional budget cuts leaving libraries vulnerable to the consequences of the pandemic long-term. This is not only a problem of libraries but also of the society with capacity building and innovative efforts halted.

Gradually, disruption evolved into resilience, adaptation and renewal in some creative industries, educational, research and cultural heritage institutions worldwide. From the user perspective, there is evidence of the need to equalize the access to internet and relevant

infrastructures to make possible that all users may have access to the online resources displayed by museums, libraries, archives, and educational and research organizations.

IT has significantly impacted educational, research and cultural heritage institutions, from the nature of work to the ways of delivering content during the pandemic. The pandemic obliged museums, archives and libraries to reorganize their interactions with their customers in a more dynamic way in order to fulfill their mission in these unstable and uncertain times. Our review demonstrated that organizations that showed adaptability, adopted a flexible approach and boosted their digital capabilities to create new opportunities for growth.

Despite the evidence of adaptability in some institutions and sectors, **other organizations did not have sufficient resilience to adjust quickly in the COVID-19 pandemic**. Some organizations suffered more than others. This was specifically true for sectors that could not fully exploit the digital technologies (low level of technology maturity or limited resources available to invest in the digital turn) and lack of infrastructure available for online delivery of their products.

The online environment has gained importance for cultural and creative industries as a whole. Online streaming became the central way for creative industries, cultural, education and research institutions, such as for music industries. The performance of virtual events has been demonstrated to be an alternative way of entertainment and revenue generation.

Similarly, for cultural heritage, education and research institutions digital became central. For example, the performance of virtual events has been demonstrated to be an alternative way to attend museums and generate revenues as well. For all those fields, there is the need to point out that **this alternative is not sustainable in the medium and long term.** Governments and other organizations have adopted recovery measures (tax measures, employment-related measures, stimulus measures, job retention schemes, self-employment income support schemes) intended to mitigate the impact of the COVID-19 pandemic. However, not all these measures were effective for some types of these organization and the people they serve.

Governments and other organizations have adopted recovery measures (tax measures, employment-related measures, and stimulus measures, approach was offer job retention schemes, self-employment income support schemes) intended to mitigate the impact of the COVID-19 pandemic in different countries. However, these industries are extremely fragmented, including different typologies of creative workers such as freelancers, self-employed, temporary and part-time workers whose status make them eligible for only some governmental support packages.

The pandemic provided several lessons for decision-makers on how to make the analyzed institutions more sustainable and resilient, including the importance of adapting to highly volatile financial conditions, digital technology adoption strategies, and the digital maturity of organizations, which provided a competitive advantage in dealing with the pandemic. The ongoing relationship between digital technologies and organizational capabilities in these organizations will continue to be crucial after the COVID-19 pandemic.

More attention should be paid to developing e-resources that should respect copyright as a whole, including facilitating uses through licensing, of material in educational and research settings. This could limit piracy damages in crisis times and support the development of local industries while paying attention to creators.

The COVID-19 pandemic raised the need for the provision of clarity to institutions and organizations regarding the copyright implications of moving towards a digital world, and to evaluate appropriate means and innovative ways to make digital uses easier. This would ensure the system is able to keep up with social changes as seen from the pandemic, as well as emerging technological developments.

[Appendix 1 follows]

APPENDIX 1: LIST OF EXPERTS CONSULTED²⁶⁷

GEOGRAPHICAL	NAME
AREA	
Belgium	GIANNA LIA COGLIANDRO
	ENCATC Segretary General
Bulgaria/	LIDIA VARBAONA
Canada	Prof. Dr.
	National Academy of theatre and film, KR. Sarafov
China	YI LIN, PhD
	Professor at the School of Arts at Peking University, Peckin University
	Director of the National Centre for Research into Intercultural Communication of Arts
	Executive President of China Arts Administration Education Association President of International Arts Education Committee of China Education Association for International Exchange
Colombia	JAIME RUIZ-GUTIERREZ, PhD
Colombia	Associate Professor
	Gestión de Arte y Cultura. Arts Management
	Facultad de Administración Universidad de los Andes, Bogota
Croatia	ALEKSANDRA UZELAC, Ph.D.
J. Outlu	Head, Culture and Communication Department
	· ·
Finland	IRMO - Institute for Development and International Relations MARIA BÄCK. PhD
Fillialiu	Degree Program Director – Cultural Management, Institutionen för kultur och media Department
	of Culture and Media Yrkeshögskolan ARCADA ARCADA University of Applied Sciences
Germany	ELMAR KONRAD, PhD
	Full professor University of Applied Sciences Mainz
Greece	VASILIS AVDIKOS, PhD
	Assistant Professor
	Department of Economic and Regional Development
	Panteion University of Social and Political Sciences
	Athens- Greece
Georgia	Levan KHARATISHVILI, PhD
	Deputy Minister, Ministry of education, science, culture and sport of Georgia
Israel	TAL FEDER, PhD
	Lecturer and Head of international relations at Sapir College
Kenya /	MUTUMA MARANGU
Nigeria	Collector and CEO of Mutuma Marangu Sculpture and Art Collection
Kenya /	ROY GITAHI
Ghana	CEO of Art@Work
Kenya	ANDREW NGURUMI
	WN & Co. Advocates (Waithumbi Ngurumi & Co. Advocates), IPR
Lithuania	ELONA BAJORINIENE, prof.
	Dean of Theatre and Film Faculty
Name	Lithuanian Academy of Music and Theatre, Vilnius
Norway	FEDERICA DE MOLLI, PhD
	Associate Professor
Daland	BI Norwegian Business School
Poland	DOROTA ILCZUK, PhD
	Professor SWPS University of Social Sciences and Humanities Warszawa
	Head of Creative Economy Research Center
Russia	EKATERINA SHEKOVA, PhD
	Associate Professor in Economics at the St. Petersburg State University of Film and Television

 $^{^{\}rm 267}$ The experts often researched territories beyond their national country.

Slovenia	ANDREJ SRAKAR, PhD
	Institute for Economic Research (IER), Ljubljana and School of Economics and Business, University of Ljubljana
South Africa	JEN SNOWBALL, PhD
	Professor of Economics at Rhodes University
	Chief Research Strategist at the South African Cultural Observatory (SACO)
	PHILIPPA DUNCAN
	Independent Art Consultant and Advisor
Spain	JUAN PRIETO ROGRIDUEZ, PhD
	Full professor of Economics
	Oviedo University
	MARTA CRISPÍ, PhD
	Professora del Grau d'Humanitats
	Universitat Internacional de Catalunya
	Facultat d'Humanitats
UAE	JORGE EDUARDO PINTO
	Acting Culture Planning & Development Department Director
	Culture Planning & Development Department, Ministry
USA	NEVILLE VAKHARIA , PhD
	Associate Dean for Research and Planning; Associate Professor, Arts Administration & Museum Leadership
	Drexel University, Philadelphia

[Appendix 2 follows]

APPENDIX 2: CASE STUDIES

PART I

SENEGAL - SODAV'S TWO-STEP RESILIENCE PLAN

Sector: Music

https://www.dakaractu.com/Coronavirus-La-Sodav-annonce-un-fonds-de-120-603-932-F-Cfa-pour-le-monde-de-la-culture a187863.html

The Senegalese Copyright and Related Rights Office (a multidisciplinary society managing all copyright and neighboring rights in Senegal) played a leading role in supporting Senegalese creators during the pandemic. In response to the crisis caused by the pandemic to the creative and cultural sector, SODAV has set up a two-step resilience plan. In the first phase, SODAV has allocated CFA francs 120 million from its reserves to support creators – CFA francs 70 million from that amount was distributed as social funding to 2,600 beneficiaries. Each of these beneficiaries has received 30 000 CFA francs and a 30% advance on the lesser of their last three distributions. In the second phase, SODAV made an advance on distribution of CFA francs 98 million to its members – CFA francs 70 million being allocated to music rights and CFA francs 31 million to digital rights. SODAV was also involved in a third phase that was supported by the state, the state making available CFA francs 1 billion to SODAV to distribute equally to all its members.

The funding from SODAV provided a greatly needed financial support to the sector and its participants in the absence of a governmental financial aid. The Office has proved to the creators that they are there for them in the times of need, sending a strong message of solidarity and further strengthening the relationships between them.

UNITED ARAB EMIRATES - NOT CANCELLED DUBAI

Sector: Visual arts

https://artasiapacific.com/news/virtual-platform-launched-in-dubai-promises-art-is-not-cancelled

In line with the worldwide increase of digital initiatives during the pandemic, a group of art galleries in Dubai (Carbon 12, Green Art, Grey Noise, IVDE, Lawrie Shabibi and The Third Line) joined forces for "Not Cancelled Dubai" - a weeklong virtual event showcasing artworks for sale alongside scheduled program of talks and tours, in an attempt to survive the pandemic together. This event was a local version of a concept initiated by the Treat Agency in Vienna to aid the local art community. Other than Dubai and Vienna, "Not Cancelled" events rolled out in Berlin, Paris, Warsaw and in some regions of the US including Chicago.

The initiative supports local art communities and encourages cooperation and unity in fighting the pandemic together. For Dubai galleries this was not their first common project proving the collaboration continuous and beneficial.

ARGENTINA - CULTURA EN CASE

Sector: CCS in general

https://vivamoscultura.buenosaires.gob.ar/

The city of Buenos Aires has utilized digital tools to fight the pandemic in its own unique way. Launching an online platform "Culture at Home", the city has created a single location at which inhabitants can access all the city's cultural offerings. Together with the promotion of creative industries, the initiative aims to keep the culture present and maintain a shared sense of social cohesion during the pandemic. The platform includes varied content from theaters, museums,

musicians, local artists and other cultural institutions and is being updated daily. In collaboration with Mexico, similar initiative has been launched in Mexico City – this partnership allowing for wide access to diverse artistic expressions for and from both cities.

This initiative facilitates access to arts and culture during the pandemic in an innovative way, ensures their continuation and maintains a feeling of social cohesion for the people – all of which is beneficial for the sector and for the public's wellbeing alike. It has also successfully extended its reach to people in a different country even strengthening the feeling of connection through culture.

SLOVENIA – THE ACT ON INTERVENTION MEASURES TO CONTAIN THE COVID-19 EPIDEMIC AND MITIGATE ITS CONSEQUENCES FOR CITIZENS AND THE ECONOMY Sector: Audiovisual

https://www.wipo.int/export/sites/www/meetings/en/docs/ministry-of_economic-development-and-technology-slovenian-intellectual-property-office.pdf

Slovenian Ministry of Economic Development and Technology has implemented a temporary tax and social and economic measures shortly after the pandemic outbreak to support organizations and individuals in cultural and creative sectors. Such efforts were specifically targeted at self-employed in the audiovisual sector, type of employment hardest hit by the pandemic due to the lack of social security coverage. Among others, these individuals have received financial assistance (payment of basic monthly income of €350 for March and of €700 for April and May both), an exemption from social security contributions in April and May 2020, an exemption from health and pension insurance contributions, advanced payments of personal income tax, a right to have their social contributions temporarily covered by the state or a reimbursement of wages to workers, who are temporarily unable to provide work.

Slovenian measures successfully targeted the cultural and creative workers in the most vulnerable positions. This is quite the unique approach in comparison to the measures taken by other countries and could lead by example.

THE REPUBLIC OF KOREA - THE MOVIE THEATHER RELIEF INITIATIVE

Sector: Audiovisual

https://www.hollywoodreporter.com/business/business-news/south-korea-unveils-coronavirus-support-film-industry-1288148/

The South Korean policy plan designed to boost the film industry in times of the pandemic centers around a governmental decision to exempt major cinema chains from having to pay the 3% of all ticket sales contribution to the Korean Film Council's movie development fund as required by local law. The exemption was applied retroactively from February 2020. Thanks to this measure, the movie theaters were able to recoup some funds that were lost due to cancelled shoots or delayed releases. In additional support the government also introduced some measures to support the production and distribution within the film industry. For instance, it has decided to subsidize a portion of marketing costs for 20 selected movies which release plans had to be postponed or cancelled at the beginning of the pandemic. The production companies of the same 20 movies have received funds to help them resume production. In terms of individual help within the sector, the government has offered free vocational training for professionals who lost their jobs or have not been able to find a freelance gig.

The South Korean government realized the importance of the film industry for the country's economy and adopted specific policy addressing the struggling sector. Movie theaters' revenues being estimated to have dropped by 88% during the pandemic, the initiative helped exhibitors to recoup lost revenues and continue in their activities.

AUSTRALIA – THE STORYTIME ARRANGEMENT

Sector: Libraries

https://www.asla.org.au/resources/Documents/Website%20Documents/Resources/Resource %20Library/Permissions%20from%20publishers%20update%209%20april.pdf

During the pandemic, the Australian Publishers Association, the Australian Society of Authors and the National Copyright Unit facilitated a temporary policy allowing for teachers from primary and secondary schools to read stories to students in a virtual classroom environment without a specific permission or payment to the authors of the stories (as would otherwise be required under the copyright regime). This adjustment of the regime allows for live streamed or recorded story time, provided the access is limited to students and their families, the recording is view only and deleted 12 months after being made, and the access to the recording is disabled as soon as the school resumes normal teaching practices. Teachers are also required to provide bibliographic details of the book at the beginning of any recorded story time.

This arrangement enables the educational institutions to continue sharing stories with their students regardless of whether they are learning on the school premises or from home and in that way continue their important educational activities in national literature. At the same time, it ensures the IPR of the authors are not circumvented more than absolutely necessary and makes sure credit is provided to the authors, somewhat successfully balancing out the interests of the pupils and the writers both.

INDIA – PM E-VIDYA

Sector: Education (Publishing) https://pmevidya.education.gov.in/

To mitigate the impact of the pandemic, the Ministry of Human Resources and Development launched a comprehensive digital campaign aimed at bringing together all online, digital and on-air education to enable multi-mode access to education. Under the umbrella initiative, there are multiple projects/platforms/applications available addressing the key features of the educational sector. **Diksha** is a repository of over 80 000 different resources (available in 18 languages) targeting different grades, curricula and subjects, including textbooks, a massive open online course and content for student assessment and teacher development. **Swayam Prahba** provides content through 32 channels (one channel per grade from standard 1 to standard 12) via direct to home services. These two platforms reliant on internet access are further accompanied by extensive use of radio for educational activities.

This initiative ensures access to education from home during the pandemic, considering the children from less developed and rural regions too. The importance of education is taken seriously by the Indian government with extremely broad coverage of resources provided and as many pupils as possible targeted, making the measure desirably inclusive and comprehensive in nature.

UNITED STATES - HUB FOR EDUCATORS

Sector: Education/Research/Publishing

https://www.copyright.com/learning-at-home-resources/

The Copyright Clearance Centre (CCC) published a resource page to accelerate sharing of knowledge and ease online learning. The page amplifies the good work of publishers in making educational resources open for educational institutions during the pandemic.

This initiative provides for a long list of educational resources in one place, making it substantially easier for a pupil/pupil's parent to find the educational material they need without having to search the entire internet.

<u>UNITED STATES – EDUCATION CONTINUITY LICENSE</u>

Sector: Education/Research/Publishing

https://www.copyright.com/blog/ccc-launches-educational-continuity-license/

The CCC has responded to urgent requests from teachers and school administrators about the use of copyrighted materials in distance learning by coordinating efforts with publishers and rightsholders to provide an authorization for US educators to address this need. These efforts resulted in the Education Continuity License, which authorized educators in the US to use publishers' materials in distance learning at no cost during the pandemic. Educators can look up participating publishers on CCC's website and indicate their intent to use their materials.

This initiative responds efficiently and collaboratively to an urgent need of educators for accessible online resources to maintain the quality of teaching in the online environment.

<u>UNITED STATES - ANNUAL COPYRIGHT LICENSE FOR CURRICULUM AND INSTRUCTION</u>

Sector: Education/Research/Publishing

https://www.copyright.com/annual-copyright-license-for-curriculum-instruction

This license launched by the CCC in July 2021 responds to the need for flexible licenses for in person, remote and hybrid learning by easing the burden of obtaining one-off permissions. The license provides both print and digital rights that enable the reuse and distribution of excerpts of published publications in curricula, educational technology applications and online platforms with just one single license.

This initiative facilitates easier and faster systems for inclusion of high-quality content within curricula and instructional materials to meet the needs of the students and expectations of the parents.

<u>ITALY – WUNDERBO</u>

Sector: Museums

https://www.wunderbo.it/

The municipality of Bologna in collaboration with a group of Bologna's museums have created a video game (co-financed by the European Commission's Horizon 2020) to encourage audiences to explore Bologna's cultural heritage in an innovative and creative way. On their journey to create a cabinet of wonders, the players are guided by three well-known historical personalities from Bologna through the Medieval Museum and the Museum of Palazzo Poggi, discovering contents of the game with augmented reality. Single player in nature, users can connect with other players and share their progress on social media ultimately becoming promoters of the cultural heritage of Bologna themselves.

Through this interactive and playful initiative, the city of Bologna promotes its cultural heritage and facilitates higher public engagement with it. In the times of pandemic, this is a brilliant way of connecting people to the culture of the city and to one another while adhering to the social distancing and isolation measures in place.

ARAB GULF STATES - THE KHALEEJI ART MUSEUM

Sector: Museums

https://khaleejiartmuseum.com/

This digital museum experience launched by Emirati sisters *Manar and Sharifah Alhinai* introduces visitors from all around the world to local artists, particularly focusing on female artists. The museum is fully managed by an Arab female team to increase participation of women in the arts in the region. It is entirely digital with no physical location. Due to its virtual nature, it was set up swiftly, responding to the pressing needs of presenting local art and extending engagement with the works to a global, rather than just regional, audience.

This initiative allows the whole world to get acquainted with the underrepresented work of artists of the Arab Gulf States, offering the artists space for their artistic realizations without limitations despite the pandemic.

TANZANIA – EDUCATION SECTOR COVID-19 RESPONSE AND RECOVERY PLAN Sector: Education/Publishing

https://reliefweb.int/sites/reliefweb.int/files/resources/The%20Impact%20of%20COVID-19 UPDF.pdf

The plan developed by the *Tanzanian government* serves the purpose of ensuring the continuation of provision of educational activities to students, so they continue learning during the pandemic. The plan was implemented with the help of the *Tanzania Institute of Education (TIE)*, which has been broadcasting lessons on TV, radio and online. In addition to these lessons, the TIE has also provided schools with access to its digital library and fast-tracked approval for existing online learning sites from community partners. The government has mobilized a range of actors – from development partners to private sector – to design content and air it on different platforms. Several development partners have provided financial or technical support to TIE and the support from the private sector came from TV stations, mobile companies and the National Bank of Commerce.

The Tanzanian government ensured the continuity of education during the pandemic in an innovative and creative way utilizing the tools and capacities that were accessible. Engaging different stakeholders and partners, this initiative can serve as a great example of successful multistakeholder cooperation for a common goal, efficiently providing students with continued education despite limited available resources.

NORWAY – THE NATIONAL LIBRARY DIGITAL CRISIS PACKAGE Sector: Libraries

https://www.nb.no/artikler/krisepakke-fra-regjeringen-og-nasjonalbiblioteket-for-a-styrker-det-digitale-bibliotektilbudet/

The Digital Crisis Package is a reaction of the Norwegian government and the National Library to the widespread closure of libraries during the pandemic. The main goal of the package is to grant access to schools and students to all the digital materials of the library (with focus on compulsory reading materials), as a replacement for a physical library offer, to be able to continue in their educational and learning activities without disruption. Realizing that the great collection of books locked inside the National Library cannot be replaced by a digital offer easily, the online library has the infrastructure to provide at least a minimum access to the breadth of Norwegian literature for which there is unquestionably a demand. In order to meet the needs of the heightened demand for digital resources, the National Library has reallocated its funds and the Ministry of Culture extended the National Library Strategy period by one year so that funds for 2020 can be also used for the package. Other than ensuring people's access to library services from home, this package can be also perceived as a charity event – purchases of e-books by the libraries and funded by the government providing income for authors and publishers.

This initiative illustrates how cooperation is the only way to fight the pandemic. Libraries, authors, publishers, educational institutions, and the government coming together to ensure wide access to digital resources while engaging in negotiations on the best mode of legal and financial model for this measure can serve as a great example for other countries that struggle to balance the needs of the libraries and the public and the needs of authors and publishers to everybody's happiness.

[Appendix 3 follows]

APPENDIX 3 BIBLIOGRAPHY

PART I

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[End of Appendix 3 and document]