ACKNOWLEDGEMENTS

UNESCO would like to express its warm gratitude to Sameh Naguib Wahba, Global Director for Urban, Disaster Risk Management, Resilience and Land Global Practice at the World Bank, for his thorough review of the report.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>4</td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>8</td>
</tr>
<tr>
<td>HOW WAS THE STUDY UNDERTAKEN?</td>
<td>10</td>
</tr>
<tr>
<td>2 HOW HAS COVID-19 DISRUPTED THE CULTURAL AND CREATIVE INDUSTRIES?</td>
<td>13</td>
</tr>
<tr>
<td>WHICH CCIs HAVE BEEN DISRUPTED THE MOST BY THE PANDEMIC?</td>
<td>15</td>
</tr>
<tr>
<td>3 AN ECONOMIC OUTLOOK: MEASURING THE IMPACT OF COVID-19 ON THE CULTURAL AND CREATIVE INDUSTRIES</td>
<td>18</td>
</tr>
<tr>
<td>3.1 COUNTRY COMPARISONS AT INDUSTRY LEVEL</td>
<td>18</td>
</tr>
<tr>
<td>3.2 GLOBAL CULTURAL AND CREATIVE INDUSTRY IMPACT</td>
<td>22</td>
</tr>
<tr>
<td>3.3 ECONOMIC LOSSES AT DOMAIN AND SUB-SECTOR LEVEL</td>
<td>26</td>
</tr>
<tr>
<td>3.4 DISTRIBUTION OF ECONOMIC IMPACT ACCORDING TO EMPLOYMENT STATUS AND OTHER FACTORS</td>
<td>29</td>
</tr>
<tr>
<td>4 DIGITAL TRANSFORMATION ACROSS THE CULTURAL AND CREATIVE INDUSTRIES</td>
<td>34</td>
</tr>
<tr>
<td>4.1 SHIFTS IN DIGITAL CONSUMPTION PATTERNS IN THE AUDIO-VISUAL AND INTERACTIVE MEDIA</td>
<td>35</td>
</tr>
<tr>
<td>4.2 DIGITAL INNOVATION ACROSS THE CCIs</td>
<td>38</td>
</tr>
<tr>
<td>ANNEX 1: TECHNICAL NOTES</td>
<td>54</td>
</tr>
<tr>
<td>ANNEX 2: BIBLIOGRAPHY</td>
<td>58</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

No corner of our planet has been left untouched by the COVID-19 crisis. The virus itself has cost many lives, and the lockdowns experienced by many countries have destroyed jobs and businesses. At the time of writing, the social and economic impact of the pandemic in the medium and long term is difficult to foresee and measure.

The cultural and creative industries (CCIs) have been among the first sectors to shut their doors and they will be among the last to reopen. Large parts of the sector depend on human congregation. As a result, venue and site-based activities, such as theatre, live music, festivals, cinemas and museums, have been hit particularly hard. Around the world, the livelihoods of workers in different sectors have been profoundly affected by lockdowns and physical distancing measures. The creative ecosystem, which combines a handful of multinational conglomerates with a multitude of freelance creatives and small and medium-sized enterprises, employs a significant proportion of these workers. Many people around the world depend on the cultural and creative industries for their livelihoods. Yet, the often precarious (or non-contractual) nature of their work has made artists and cultural professionals particularly vulnerable to the economic shocks that the pandemic has triggered.

MEASURING THE ECONOMIC IMPACT OF COVID-19

It can be assumed that the scale of the economic fallout of COVID-19 on the cultural and creative industries is enormous. However, measuring this fallout poses a number of challenges, not least of which is the scarcity of data on the contribution of the sector to the overall economy and the often-informal nature of cultural and creative work.

Setting such challenges aside, new secondary research carried out for this report demonstrates that the cultural and creative industries are more economically important than ever. The research finds that as of January 2021:

- 51.2 million people across the globe were self-registered as working in some capacity (full-time, part-time, intern) in the cultural and creative industries on LinkedIn,
- this number accounted for 6.7% of all global LinkedIn users at the time, and represented 48.4 million full-time equivalent (FTE) jobs.¹

Nevertheless, this figure does not claim to capture the full scale of the global cultural and creative industries workforce. LinkedIn’s user base is huge with 762 million users worldwide, but it is only equivalent to about 20% of the global workforce. Furthermore, sector affiliation is self-reported and the geographic distribution of LinkedIn’s users is uneven, with 24% of all users in the United States of America, despite having 4.3% of the world’s population.²

¹ Data from LinkedIn, analysis by Curator Technologies and BOP Consulting as of January 2021. The FTE calculation excludes interns and assumes one part-time job is equivalent to 0.5 of a full-time job.
² Calculation based on figures from United States Census Bureau and UNDESA latest World Population Prospects (2019).
By contrast, the 114m LinkedIn users in Latin America and the Caribbean represent 15% of LinkedIn global database, while the region concentrates 8% of the world's population. But despite these limitations, LinkedIn data provides a minimum order of magnitude of the sector’s global labour force.

This report is the result of an international evidence review. It has identified and assessed credible studies that focus specifically on the economic impact of the COVID-19 pandemic on the cultural and creative industries, rather than on other kinds of impacts, such as policy responses or the impact on audiences.

The evidence reviewed for the purpose of this report presented several challenges in terms of quantifying the economic impact of the crisis on the cultural and creative industries at the global level. At the national level, studies cover some countries and regions (e.g. Europe and North America) much better than others (e.g. Eastern Europe and Arab States), with 30 studies out of the 54 reviewed examining the economic impact of the pandemic in Europe and North America. At the domain and sub-sector level, activities that have been the worst hit (e.g. music, theatre, museums, cinemas) by public health measures (e.g. lockdowns) implemented to curb the spread of the pandemic, are much better covered than those that have been less badly affected (e.g. design and creative services). As a result, almost half of the studies reviewed focus on a specific cultural domain or sub-sector, as classified by UNESCO’s 2009 Framework for Cultural Statistics. Cross-comparison is further complicated by the fact that not all studies use the same economic metrics. Even when they do, they can be denominated differently and measured over different time periods.

Despite the challenges raised by the evidence, the numerous studies that have been produced since the start of the crisis provide credible estimates of the economic impact of COVID-19 on the cultural and creative industries in 20 mid to large size economies, which collectively account for 61% of the world economy. On the basis of these studies, an economic model has been built to estimate the global impact of the pandemic on CCIs. This model utilises data from these studies on the specific impact of COVID-19 and combines it with other existing economic data on national Gross Domestic Product (GDP) and the contribution that the cultural and creative industries make to it in different countries.

The derived estimate is that in 2020 there was a US$750bn contraction in the Gross Value Added (GVA) generated by the cultural and creative industries globally, relative to 2019. The magnitude of this loss is larger than the entire nominal GDP reported in many countries across the world in 2019, such as Poland, Thailand and the United Arab Emirates. It equates to around 1% of global nominal GDP in 2019, and represents a dramatic fall in the capacity of the cultural and creative industries to sustain culturally and socially valuable outcomes.

The human cost is also clear. The evidence reviewed suggests that there was a very rapid drop in employment in the cultural and creative industries themselves in 2020, even without counting the impact on related sectors such as tourism.

3 Latin America and the Caribbean is the only region for which the geographical breakdown for the LinkedIn global database statistics coincides with that of the SDG regions' population statistics.
4 The 20 countries are listed in Figure 4 of this report.
5 Nominal gross domestic product is GDP given in current prices, without adjustment for inflation. It seeks to provide a more adequate measure of people’s material well-being than GDP.
The estimated US$750bn fall in global CCIs’ GVA corresponds to upwards of 10 million job losses in the sector across the world in 2020.\(^6\) This estimate applies a ratio between the reduction of CCIs’ GVA and resulting job losses that is derived from a study on the United Kingdom of Great Britain and Northern Ireland (Oxford Economics, 2020).\(^7\) As labour costs are relatively high in the UK, this ratio provides a conservative estimate of global job losses.

The economic model only captures the direct economic impact of the crisis on the cultural and creative industries and not the ‘knock-on effects’ (i.e. the indirect and induced impacts). In this sense, the figure of an estimated US$750bn contraction in GVA is most likely an underestimate of the overall economic impact of the COVID-19 pandemic on the cultural and creative industries. With output and job losses occurring in all regions of the world, the task of rebuilding the cultural and creative industries is considerable.

### CULTURAL AND CREATIVE INDUSTRIES IN TIMES OF CRISIS

Notwithstanding the challenges cited above, some findings are clear when looking across the international evidence:

- The cultural and creative industries that are most dependent upon physical experiences at venues and sites have suffered the sharpest economic losses in relative terms, across many different national contexts.
- Studies at country level consistently report an overall fall in cultural and creative industries’ Gross Value Added over 2020.
- The performance of cultural and creative industries across different countries is also consistently worse than the overall performance of these national economies.
- Losses in revenue of cultural and creative industries in 2020 ranged between approximately 20 to 40% across different countries.
- Fortunes of cultural and creative industries in different territories appear to be linked to how countries as a whole have dealt with the pandemic.
- The biggest absolute falls in the economic contribution of the cultural and creative industries have been observed in megacities and other major urban centres, where these industries are heavily concentrated.
- The self-employed have experienced higher levels of income loss and unemployment than other categories of cultural and creative workers.

---

\(^6\) The method used for deriving a global estimate of the economic impact of COVID-19 on the CCIs is included in Annex 1.

\(^7\) The ratio derived from the Oxford Economics study is that one cultural and creative industries job is lost for every £71,000 of lost GVA in the United Kingdom’s CCIs.
TOWARDS NEW DIGITAL OPPORTUNITIES

Although the crisis is still ongoing, many efforts are underway to address the challenges associated with COVID-19. Without underestimating the persistent digital divide that places the cultural and creative industries of certain regions of the world on an unequal footing with those of other regions, this report ends by exploring some of the newer ways in which digital technologies are being used by audiences and cultural professionals – innovations which may become permanent features of the cultural and creative industries in the future.

Digital adaptation has been particularly strong in the audio-visual industries. On-going restructuring is being speeded up by the pandemic as traditional pay-TV providers’ popularity declines and ‘over the top’ (OTT) streaming services continue to grow, transforming the whole value chain.

In other cultural and creative domains, the pandemic has triggered the emergence of innovative digital production, distribution and consumption patterns. In the medium to long term, this trend could also inspire new business models.
1. INTRODUCTION

In 2020, the COVID-19 outbreak spread rapidly to reach all corners of the globe. At the time of writing, cases are still multiplying. In addition to the devastating impact on human lives, the pandemic and the associated public health responses from governments have battered the economies of many countries across the globe.

The devastating impact of the COVID-19 pandemic on the cultural and creative industries (CCIs), which are among the most disrupted as they often depend on the gathering of people in closed spaces (e.g. cinemas, concert halls, theatres, art galleries) has prompted an international upsurge in advocacy and research that attempts to quantify the damage already caused by the pandemic, and highlight what else is in danger of being lost going forward. This is the urgent context for this report.

All over the world, statistical tools have been strongly mobilised as it was urgent to measure the extent of the economic and financial repercussions of the crisis to better inform public decision-making. However, the unprecedented and brutal impact of the crisis on economic activity has called into question the statistical models that are traditionally used. Measuring the impact on Gross Domestic Product (GDP) has proved impossible using standard forecasting methods. The difficulty is even more acute for the cultural and creative industries, which have historically faced significant challenges in collecting data on the sector’s contribution to GDP. It is therefore often through surveys that countries have tried to assess the economic impact of COVID-19 on CCIs.

Based on a review of existing evidence on the economic impact of the pandemic on CCIs worldwide published between March 2020 and January 2021, this study has two main objectives:

1. Primary: quantify the scale of the economic impact of the pandemic on the CCIs on jobs, revenues and GVA / GDP; and

2. Secondary: investigate the effects of the crisis on operating models of the CCIs globally, particularly in terms of how the crisis has led to more cultural consumption and provision taking place online.

The primary objective takes the shape of a review of studies and statistical reports produced across the world in the period mentioned above. The secondary objective is examined with reference to user and audience data regarding a range of digital cultural activities, as well as a short series of case studies of innovative business models that have emerged from cultural organisations in response to the pandemic.

For the purpose of this report, the six main cultural domains and related sub-sectors considered are designated according to the terminology and classification of within UNESCO’s 2009 Framework for Cultural Statistics. As the availability of data varies from sub-sector to sub-sector, the snapshots presented in this report cannot provide a complete overview of a cultural domain and are therefore presented by sub-sector.
### An Economic Impact Outlook

As the graphic above shows, cultural domains encompass artisanal activities, technologically-intensive media industries that came to prominence in the twentieth century and the design-intensive and born digital creative industries of the new millennium.

While the economic benefits from the growth of the cultural and creative industries have historically been rooted in advanced economies, the last two decades have seen more dispersed growth, with many cities and regions in emerging and developing economies also seeing associated economic gains.

This growth trajectory prompted CISAC (the International Confederation of Authors and Composers Societies) to commission a global study on the cultural and creative industries in 2015 (EY, 2015). The report estimated that the cultural and creative industries generated US$2,250 billion in revenues, supported almost 30m jobs and employed approximately 1% of the world’s active population. New research carried out for this report suggests that in 2021, these figures most likely represent a significant under-estimate of the economic importance of the cultural and creative industries.

Analysing the user base of LinkedIn’s 762m users worldwide provides a snapshot of the global cultural and creative industries’ labour market:

### WHAT ARE THE CULTURAL AND CREATIVE INDUSTRIES AND WHY ARE THEY ECONOMICALLY IMPORTANT?

As the graphic above shows, cultural domains encompass artisanal activities, technologically-intensive media industries that came to prominence in the twentieth century and the design-intensive and born digital creative industries of the new millennium.

While the economic benefits from the growth of the cultural and creative industries have historically been rooted in advanced economies, the last two decades have seen more dispersed growth, with many cities and regions in emerging and developing economies also seeing associated economic gains.

This growth trajectory prompted CISAC (the International Confederation of Authors and Composers Societies) to commission a global study on the cultural and creative industries in 2015 (EY, 2015). The report estimated that the cultural and creative industries generated US$2,250 billion in revenues, supported almost 30m jobs and employed approximately 1% of the world’s active population. New research carried out for this report suggests that in 2021, these figures most likely represent a significant under-estimate of the economic importance of the cultural and creative industries.

Analysing the user base of LinkedIn’s 762m users worldwide provides a snapshot of the global cultural and creative industries’ labour market:

<table>
<thead>
<tr>
<th>Categories</th>
<th>Services/Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. CULTURAL AND NATURAL HERITAGE</td>
<td>Museums, Historical Places, Archaeological Sites, Cultural Landscapes, Natural Heritage</td>
</tr>
<tr>
<td>B. PERFORMANCE AND CELEBRATION</td>
<td>Performing Arts, Live Music, Dance, Festivals, Feasts &amp; Fairs</td>
</tr>
<tr>
<td>C. VISUAL ARTS AND CRAFTS</td>
<td>Fine Arts, Photography, Crafts</td>
</tr>
<tr>
<td>E. AUDIO-VISUAL AND INTERACTIVE MEDIA</td>
<td>Film, TV and Radio, Streaming, Podcasts, Video Games</td>
</tr>
</tbody>
</table>

#### 51.2M people self-registered on LinkedIn as working within the cultural and creative industries, as of January 2021

#### 6.7% of all global LinkedIn users\(^8\)

#### 48.4M Full-Time Equivalent jobs.

It should be noted that there are large geographic gaps in LinkedIn’s user base. Moreover, not only many artists and cultural professionals, notably from developing countries, tend to work within informal cultural and creative economies, but also many professional networks are being built outside of LinkedIn, which is not a platform that, for example, artists would use from a work/commission/client/audience search perspective. Finally, the information collected on LinkedIn profiles only relates to users with a minimum level of digital skills, Internet access and connectivity, which is not necessarily representative of the mass of cultural workers worldwide.

Even without upweighting the data to take into account these constraints, the LinkedIn raw jobs figures as of January 2021 are impressive.

This global overview of employment gives a minimum order of magnitude of the number of livelihoods in the cultural and creative industries at stake when considering the adverse effects of the COVID-19 pandemic.\(^7\)

---

8 LinkedIn, analysis by Curator Technologies (2021).
9 For the technical details regarding how the LinkedIn analysis was undertaken, please see Annex 1 below.
**HOW WAS THE STUDY UNDERTAKEN?**

The design of the study is important as it needs to overcome some major challenges:

- The literature on the impact of COVID-19 on the CCIs is already voluminous, albeit it covers a much wider range of areas than simply economic impact (e.g. policy responses to the crisis, the impact of the virus on arts and culture audiences, how it has affected the well-being of artists and cultural professionals, and so on).
- The data and evidence concerning the economic impact of the COVID-19 pandemic on the CCIs has necessarily been assembled very rapidly.
- Some of the evidence has also been produced as part of wider advocacy efforts designed to convince governments of the need for financial support measures for the CCI sector.
- New evidence is being produced daily, as the crisis is still ongoing. Consequently, it will be important to be able to update this study in future.

It was therefore essential that the study be able to focus on economic impact specifically, have some means to assess the quality of the data and evidence under review, and adopt a process that is repeatable.

The chosen approach was to apply techniques from a ‘systematic’ literature review, while implementing them in a way that is appropriate for research produced in the context of a fastmoving global emergency. What this means is that the evidence review was conducted in stages that filtered out results that were either not relevant to the specific research questions or scope and / or were of too low quality to be included. The five stages of this process are the following:

1. **SEARCH STRATEGY**

In most full systematic literature reviews, the main starting point would be to search relevant academic databases, such as Web of Science. However, this assumes that academic literature will provide the main sources for the study. In relation to the COVID-19 crisis, the need for speed in researching and publishing has meant that there has been insufficient time, in the main, for academic studies to be released within the timeframe of the review. This study therefore has had to rely overwhelming on ‘grey’ literature. This consists of studies researched and published by a range of different actors. In the case of the present study, it is governments, multilateral organisations, trade bodies and associations, foundations and consultancy companies that are the most prominent sources.

2. **SCOPE**

All evidence reviews need key parameters to establish what is and what is not in scope. In this case, the two parameters were:

- Languages: Arabic, English, French, German, Italian, Mandarin, Portuguese, Spanish.

---

10 For instance, typing in “the impact of the COVID-19 pandemic on the cultural and creative sector” into Google returned 37.5m hits (as of 20 January 2021)
It was not necessary to restrict the search by geography as the evidence review was intended to be global. This search strategy, in particular the focus on ‘economic impact’, dramatically narrowed down the number of possible sources, returning a little over 150 studies for initial review.

3 SELECTION PROCESS

The next stage in the review was to apply key inclusion and exclusion criteria. Specifically, in order for studies to progress to the next stage of review, they needed to:

• be empirical rather than theoretical, and
• contain specific quantitative data about the impact of COVID-19 on aggregate levels of output and / or employment.

89 studies from the search process met both of these criteria.

4 DEFINING WHAT MAKES GOOD EVIDENCE

The next stage of a typical systematic literature review would be to apply a scientific quality standard to the academic evidence identified thus far. However, as the evidence in this case is not academic and would not meet the very high standards specified in generic social scientific standards, it was not appropriate to use them. Instead, to keep hold of the principle of using a quality threshold within the review, a bespoke quality system was designed to rate the collated evidence, consisting of seven criteria:

1. Transparency of method: studies needed to be clear as to how any economic impact figures or estimates had been generated.
2. Robustness of sample size (where relevant): studies based on surveys with smaller sample sizes scored lower.
3. Credibility of secondary sources (where relevant): studies based on secondary data sources known to have some quality assurance processes in place (e.g. those produced by national statistical agencies or well established national / international trade bodies) scored higher.
4. Geographic coverage: as the findings need to apply at the global level, studies covering larger geographies (e.g. regional blocs or country groupings) scored higher than those focused on lower level geographies.
5. Sectoral coverage: as the findings need to apply at the sectoral level, studies covering the whole of the cultural and creative industries scored higher than those focused on individual sub-sectors and industries.
6. Track record of the author(s): authors that have a background in both economic analysis and the CCIs scored higher.
7. Track record of commissioner(s): commissioners that have a track record in commissioning economic research scored higher.

54 of the 89 pre-selected studies adequately met these criteria and were therefore reviewed in full.
The 54 studies covered countries from all regions across the globe. However, as the map below shows, studies covering Western Europe and North America are much more frequent than for other geographic regions. Also, two of the regions – Eastern Europe and the Arab States – were only covered by global or regional studies, there were no country-specific studies.

Based on the evidence presented above, section 2 of the report explains how the spread of the virus has disrupted the cultural and creative industries – and some activities more than others. Section 3 provides an analysis of the economic consequences of this disruption on the cultural and creative industries. The fourth and final section of the report examines some of the innovations to emerge from the crisis to date, specifically the degree to which cultural professionals and audiences have continued to engage in cultural activities throughout the pandemic, but increasingly online.
2. HOW HAS COVID-19 DISRUPTED THE CULTURAL AND CREATIVE INDUSTRIES?

Since the outbreak of the pandemic, there has been a diversity of public health responses from governments across the world - at country, province and city level - and their positions have changed over time as COVID-19 cases have risen or fallen. Despite differing starting points and the timing of public health interventions, the type of measures taken by governments to combat the pandemic have a lot in common across the world, ranging from group meeting regulations, travel bans and business and institutional closures.

Cultural and creative industries have directly suffered from these public health measures, as they have caused the postponement or cancellation of activities. In contexts where such measures have been instituted, the immediate negative impact on the CCIs gets progressively worse as the restrictions to control the virus get more severe.

Many countries have gone through at least some of the public health responses outlined in Figure 2, or even a complete ‘cycle’. Indeed, along with many other businesses and institutions, CCI facilities have usually been forced to reduce their capacity or close temporarily as a result of lockdown measures. It is now clear that “the longer the recovery of [artistic activities] is delayed, the more lastingly [they] will be affected” (UNESCO, 2020d).

Furthermore, only a small number of countries was able to curb the spread of the virus enough to lift restrictive public health measures, consequently enabling CCI activities to return to near-normal levels.
FIG. 2  EXAMPLE OF A SEQUENCE OF PUBLIC HEALTH RESPONSES TO THE COVID-19 PANDEMIC AND THEIR IMPACT ON THE CCIs

Infections spread

Travel restrictions imposed

Infections increase again

Meeting in groups regulated

Less demand for in-person cultural experiences

Infections continue to increase

Reduced output

CCI facilities close (lockdown)

Reduced capacity

Infections reduce

Slow re-opening of CCI facilities (with social distancing)

WHICH CCIs HAVE BEEN DISRUPTED THE MOST BY THE PANDEMIC?

The nature of the public health measures taken by governments to attempt to halt the spread of the virus means that some activities are more disrupted than others within the CCI sector, given the variety of functional characteristics across the six cultural domains.

In particular, the more physical presence and social interaction are central to the cultural experience, the more badly hit they will be. This means that venue or site-based activities (e.g. theatre, live music, festivals, exhibitions) will be hit harder than cultural experiences that are accessed digitally and / or at home (e.g. TV, books, recorded music, games). Even within venue and site-based activities, there will be differences between outdoor and indoor venues.

As confined spaces with limited air circulation, indoor cultural venues represent contexts that are known to be more conducive to the spread of the virus. Building capacity also places constraints on the extent to which physical distancing can be implemented, though this will clearly vary according to the size of the venue. The ability of visitors to avoid contact with each other and with staff, and the ease of avoiding touching surfaces will also differ according to activity (e.g. at a live music concert, all of these things are likely to be harder to achieve than at a gallery or museum).

Lastly, there are also differences in how feasible it is - both operationally and financially - for workers in different CCI sub-sectors and domains to transition to working remotely / working at home. In general, the more that work pre-pandemic was office-based (e.g. design, advertising, publishing, games), the easier it is and the more financially viable it is to transition workers to remote working (as revenues are less likely to be hit by public health measures that target physical activities).

**FIG. 3  KEY CHARACTERISTICS THAT AFFECT THE LEVEL OF DISRUPTION EXPERIENCED ACROSS THE SIX CULTURAL DOMAINS**

<table>
<thead>
<tr>
<th></th>
<th>Importance of in-person audience activities</th>
<th>Ability to adapt to physical distancing</th>
<th>Feasibility of remote / home working</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and Creative Services</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Audio-visual and Interactive media*</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Books and Press**</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Visual Arts and Crafts</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Performance and Celebration</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Cultural and Natural Heritage</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Impact of key characteristics on the level of functioning through the COVID-19 pandemic:
- Some disruption
- Significant disruption
- Extreme disruption

* Cinemas = worse affected / ** Libraries & Bookshops = worse affected

The following snapshots illustrate the disruption caused by the pandemic to the different cultural domains and sub-sectors across global regions and countries.

**MUSEUMS**

- **90%** Temporarily closed at the height of the pandemic
- **13%** Facing permanent closure

**Museum closures:**
- 39% Arab World
- 27% Asia
- 24% Africa
- 12% Latin America + Caribbean
- 10% North America
- 8% Europe

**Able to provide Digital Content**
- 26% Museums in Europe
- 7% Museums in the Arab states
- 5% Museums in Africa

SOURCE: UNESCO (2020a) based on ICOM (2020)

**PERFORMING ARTS AND MUSIC**

**ITALY**
- 7,000
- Performing arts events cancelled February / March 2020

**BRAZIL**
- 8,100
- Music performances cancelled in March 2020

SOURCES: La Fondazione Centro Studi Doc (2020); DATAsim: Semana International Musica (2020)

**VISUAL ARTS AND CRAFTS**

**OF 13 BIENNALES AND MAJOR EVENTS***:
- 1 IN 3 CANCELLED
- 2 IN 3 PHYSICAL OR DIGITAL

*Research by BOP Consulting, see Annex 1 for the sample of biennales and art events reviewed.
OF 13 INTERNATIONAL BOOK FAIRS SCHEDULED TO TAKE PLACE AROUND THE WORLD IN 2020*:

• MORE THAN 50% BOOKFAIRS POSTPONED
• ONLY ONE TOOK PLACE AS PLANNED**

SOURCES: OECD (2020); Oxford Economics (2020)

*Research by BOP Consulting, see Annex 2 for the sample of book fairs reviewed. **Feria del Libro de Madrid was the only book fair that ran as planned.

COVID-19 delayed up to 60% of scripted television programming worldwide in 2020

In the UK, 65% of film and high-end TV production was estimated to have been halted during the first lockdown

SOURCES: OECD (2020); Oxford Economics (2020)

DESIGN AND CREATIVE SERVICES

Of 23 international Design Week and festivals, almost one third were cancelled*

Textile and clothing shipments from Bangladesh to Europe (the destination for 60% of the country’s garment exports)

1 IN 3 CANCELLED

19% DOWN

*Research by BOP Consulting, see Annex 1 for the sample of Design Weeks and events reviewed.
3. AN ECONOMIC OUTLOOK: MEASURING THE IMPACT OF COVID-19 ON THE CULTURAL AND CREATIVE INDUSTRIES

3.1 COUNTRY COMPARISONS AT INDUSTRY LEVEL

THE CHALLENGES OF SOURCE HETEROGENEITY

The picture that can be painted at individual country level from the studies is not fully comprehensive. Economic data for countries identified through the evidence review inevitably reflects the sources from which it is drawn (see the map in the previous section). Therefore, more data is available for countries in the Global North and Europe in particular, than for the Global South.

A second challenge is that almost half or the studies that were reviewed in full (26 of 54) focus only on an individual sub-sector of the cultural and creative industries (e.g. music, cinemas) or domain (e.g. heritage). As we have seen in the first section, there is a wide variation across the cultural and creative industries in terms of how individual sub-sectors and activities are affected by the COVID-19 pandemic. This means that extrapolating to the cultural and creative industry level from data that is strongly weighted towards studies of individual sub-sectors is likely to introduce significant bias. This is particularly so given that the sub-sectors that are most commonly represented in the studies cover venue-based activities (e.g. live music, performing arts, museums, cinemas), which are the cultural and creative industries activities most affected by the pandemic.

Cross comparison is further complicated by the fact that studies do not all use the same economic metrics equally. Specifically, fewer sector-wide studies at country level report on employment losses caused by the pandemic. Lastly, different country studies report data for differing time periods and these are sometimes less than 12 months. The reported percentage changes for each given time period have therefore been annualised in the following analysis to enable comparison.

LOSSES IN REVENUES OF CULTURAL AND CREATIVE INDUSTRIES

Country data on revenue losses within the cultural and creative industries during 2020 demonstrates how the sector’s fortunes are linked to how the country as a whole dealt with the pandemic.
Data from China’s National Bureau of Statistics shows how revenues of cultural and creative industries initially plunged by 14% in the first quarter of 2020 but by the end of the year had recovered to report a 2.2% growth over the year. This reflects China’s success in tackling the virus as the year progressed.

Unfortunately, elsewhere the pandemic disrupted economic and social life much more comprehensively throughout 2020.

In every other country for which we can extract cultural and creative industries revenue data, 2020 losses ranged between approximately 20 to 40%. These substantial revenue falls apply across States in Africa (e.g. South Africa: -38%), Europe (e.g. UK: -30%, France: -25%, Germany: -23%) and North America (e.g. US: -27%). From a global region perspective, preliminary data from a joint study undertaken by MERCOSUR, UNESCO, IDB, SEGIB and OEI (forthcoming, 2021), looking at South and Central America, reported that 52% of cultural and creative businesses experienced a decrease in revenue of more than 80% in 2020, with the majority of remaining businesses also experiencing revenue falls and only 12% registering no decline in revenues.

**GROSS VALUE ADDED LOSSES IN CULTURAL AND CREATIVE INDUSTRIES**

The Gross Value Added (GVA) generated by the cultural and creative industries approximates the contribution that the sector makes to national GDP. It closely follows trends in revenue, as GVA is a financial measure of economic output that is calculated as the value of revenues minus the intermediate costs of production required to generate this revenue.

Many more studies report on the impact of the pandemic on CCIs’ revenue than on CCIs’ GVA. However, the consistent relationship between revenue and GVA means that it can be assumed that percentage falls in CCIs’ GVA will be commensurate with the falls in revenues reported by studies focusing on this metric. In this way, derived GVA data for 17 out of 20 countries in Figure 4 places the falls in GVA for the cultural and creative industries over the year at between 30-40%. Further, in all countries but China, the cultural and creative industries have suffered far worse than the national economy as a whole, as measured by national GDP.

---

12 The data on New Zealand in Figure 4 is taken from a study that reports directly in GVA terms (Infometrics, 2020). For the other 19 countries, CCIs’ GVA is assumed to have experienced percentage declines consistent with the reported declines in CCIs’ revenues.
SOURCES: Arts Management Network, Brookings Institute, Ernest and Young, International Monetary Fund, Ministry of Culture and Heritage (China), National Bureau of Statistics (New Zealand), BOP Consulting analysis.
New Zealand’s COVID-19 case load was significantly less than elsewhere and meant that the country only suffered 25 deaths related to the virus in the whole of 2020. This positive health performance contributed to limiting the fall in GVA for the cultural and creative industries over 2020 to 16% year-on-year. As China and New Zealand are the two strongest performers on cultural and creative industries GVA in 2020, it again suggests a positive relationship between the efficacy of national COVID-19 public health responses and the strength of the cultural and creative industries' performance. The fewer COVID-19 cases within a country, the less governments have to ‘lockdown’, the less audiences are put off attending venues, and the more economic and social life can function. This enables both national GDP and cultural and creative industries GVA to be more robust than in countries where there is a higher incidence of the COVID-19 virus.

LOSSES IN EMPLOYMENT IN THE CULTURAL AND CREATIVE INDUSTRIES

Trends in employment are usually linked to what happens to revenues, albeit employment is often described as a ‘lagging indicator’, as increases or decreases are often first registered in revenues which can then trigger hiring or firing decisions.

However, it is clear that during the pandemic, the fall-off in employment was not lagging - very large job losses in the cultural and creative industries were registered very quickly across the small number of countries for which data was available. These decreases ranged from a high of a 55% decline in the Philippines, to a 13% fall in New Zealand.

Other studies provide further evidence of how badly workers in the cultural and creative industries have been hit by the COVID-19 pandemic across the world. For instance:

- Across South and Central America, between July and September 2020, 55% of cultural and creative industries workers are estimated to have experienced a decrease in income of more than 80% (MERCOSUR et al., forthcoming 2021).

- In Brazil, a survey of those economically engaged in the cultural and creative industries found that during March and April 2020, 41% of respondents lost all their cultural and creative industries revenues, while during May and July 2020, this proportion rose to 49% (UNESCO, 2020b).

- A survey in Panama found that 85% of those working in theatre (85%) and music (84%) suffered some income loss following the pandemic (Saravia et al., 2020).

- 22% of creative economy workers in India faced a reduction in income of over 75% in 2020/21 (British Council, 2020).
### 3.2 GLOBAL CULTURAL AND CREATIVE INDUSTRY IMPACT

#### AN ATTEMPT TO CALCULATE GLOBAL FIGURES

None of the evidence and data reviewed for this study present figures for the economic impact of the COVID-19 pandemic on the cultural and creative industries at the global level. However, it is possible to use data from these studies and combine it with other economic data on national GDP and CCIs’ GVA in countries to produce an estimate of this global impact. Further details on the method and sources used in the modelling are described in Annex 1.

The countries on which the economic modelling is based are the 20 countries listed in Figure 4. These are not representative of all countries in which the cultural and creative industries operate, especially those in Africa and Asia-Pacific, where the cultural and creative industries often operate in the informal economy. However, the 20 countries do include seven of the ten largest economies in the world, the second largest economy in Africa (South Africa), and collectively they account for 61% of the world economy. Using this method, the estimate derived from the modelling is that the fall in CCIs’ GVA globally in 2020 relative to 2019 was approximately US $750bn.

To put this estimation in context: US $750bn is larger than the entire nominal GDP reported in many countries across the world, such as Poland, Thailand, and the United Arab Emirates (UAE), and it equates to around 1% of global nominal GDP in 2019.

#### FIG. 5 ESTIMATE OF THE GLOBAL LOSSES IN GVA FOR THE CCIS IN 2020

- **Poland**: GDP US$596bn (2019)
- **Thailand**: GDP US$543bn (2019)
- **United Arab Emirates**: GDP US$421bn (2019)

*Grossed up estimation, covering 152 countries, based on data from the 20 countries listed in Figure 4.*

---

An Economic Impact Outlook

This decrease, while still being comparatively small relative to total global output, represents a dramatic fall in the economic contribution of the cultural and creative industries across the world, as well as in the sector’s capacity to sustain culturally and socially valuable outcomes. A drop of US$750bn represents a 21% decline in the global contribution of the CCIs to global GVA/GDP, based on our estimate that the cultural and creative industries contributed $3.4 trillion to global GVA/GDP in 2019. This figure seems a reasonable projection which, in any case, underestimates the real impact since the indirect effects of the COVID-19 crisis on the cultural and creative industries (including other individuals and companies in the supply and value chains) are not taken into account.

**HOW DOES THIS PERFORMANCE COMPARE TO PRIOR CRISES AND THE EXPERIENCE OF OTHER COVID-AFFECTED SECTORS?**

A comparison with the last international systemic crisis faced by the cultural and creative industries shows that the CCIs have been hit much harder by the COVID-19 pandemic than by the Global Financial Crisis (GFC) of 2008/9. A report launched at the United Nations in 2011 noted that despite the financial crash having triggered a 12% decline in global commerce in 2008, world trade in creative goods and services had continued to expand during and immediately after the period with an average annual growth rate of 14% (UNCTAD and UNDP, 2011).

In the present day, evidence suggests there are other areas of the economy that have been hit even harder than the cultural and creative industries by the COVID-19 crisis. For instance, the International Civil Aviation Organization (ICAO), has reported that international passenger traffic suffered a 60% fall during 2020, resulting in losses that totalled US $370bn (for a smaller industry than the whole cultural and creative industries). In addition, in some cases, parts of the aviation sector may have had the opportunity to diversify into less affected sectors (e.g. freight transport), which is not the case for the CCIs.

Therefore, while the fall in CCIs’ economic output in 2020 is still likely to be less severe than the declines experienced in industries that are even more exposed to COVID-related restrictions (e.g. aviation), it was greater than economy-wide reductions in economic activity, and far worse than previous crises that the sector has faced in modern times.

**THE WIDER ECONOMIC EFFECTS OF THE CONTRACTION OF THE CULTURAL AND CREATIVE INDUSTRIES**

This estimated global contraction of US$750bn only relates to direct CCIs’ GVA (i.e. the GVA generated by firms and workers within the cultural and creative industries). However, as direct CCIs’ GVA falls, this reduction will, in turn, depress wages and revenues among suppliers and other industries related to the cultural and creative industries. These knock-on impacts are referred to as ‘indirect’ and ‘induced’ impacts.

---

Across the studies reviewed, there is almost no attempt to measure these impacts. The one exception is the Olsberg SPI report on *Global Screen Production – The Impact of Film and Television Production on Economic Recovery from COVID-19* (2020). This estimates that the reduction in total direct revenues globally within this industry of $62bn in the first six months of 2020 corresponds to a total fall in revenues of $145bn, once the $83bn indirect and induced impacts are also included. This is more than double the total for direct impact alone. However, as no other studies in the review provided comparable estimates for other domains or sub-sectors, no attempt has been made to derive estimates for the indirect and induced economic impacts of COVID-19 on the CCIs.

Thus, the estimated US $750bn contraction captures only direct impact, not indirect nor induced impacts, and therefore it only captures a fraction of the full economic impact that flows from reduced activity within the CCIs in 2020 due to COVID-19.

**WHAT IS THE GLOBAL IMPACT ON EMPLOYMENT IN THE CULTURAL AND CREATIVE INDUSTRIES?**

An estimate of the impact on jobs in the cultural and creative industries can be derived from the fall in economic output. The estimated US $750bn decline in global CCIs’ GVA corresponds to upwards of 10 million job losses in the CCIs across the world in 2020. Although this is a conservative estimate, it still represents a massive curtailment in the human capital of the global cultural and creative industries.

This is a conservative estimate because it only includes job losses related to direct economic impact in the CCIs, and it assumes the same relationship between CCIs’ GVA and employment falls in 2020 across the world, as reported in a study on the United Kingdom of Great Britain and Northern Ireland (UK), one of the few with sufficient data granularity to allow the relationship between CCIs’ GVA and employment to be derived (Oxford Economics, 2020). It is likely that outside of the UK, the relationship between CCIs’ GVA and employment is such that the same nominal fall in CCIs’ GVA would produce a proportionately greater fall in CCIs employment. Therefore, by grounding the global estimate of the CCIs’ fall in employment on a ratio derived from the UK, a country with relatively high CCIs wage rates, it is unlikely that this represents an overestimation of the extent of the decrease in employment in 2020.

As with the estimate for output losses, this estimate of job falls can be contextualised, in this case with reference to the global CCIs workforce as measured by LinkedIn data presented in section 1. The 10m job losses would equate to a little under 20% of the 51m people self-registered as working in the CCIs – though it is clear that the figures from LinkedIn are a significant underestimate of the total global CCIs workforce. Thus, if 10m jobs were lost in 2020, then this is most likely a lot less than 20% of the total CCIs workforce. This comparison suggests that the estimate of 10m CCIs jobs lost globally is plausible.
WHAT WILL HAPPEN TO CULTURAL AND CREATIVE INDUSTRIES WORKERS LOST DURING THE COVID-19 PANDEMIC?

Where reduction in the spread of COVID-19 allows for a resumption of cultural activities, it may be that those that have lost jobs in the cultural and creative industries during 2020 are able to return to employment in the CCIs. However, the longer that countries fail to secure a reduction in the spread of the virus sufficient in scale to facilitate this cultural recovery, the more likely it is that unemployed CCIs workers will seek employment in other sectors or exit the labour market entirely. This may well hold true even for countries where various types of government financial assistance are being provided to some CCIs workers.

Given the speed and scale of the falls in income and revenues for workers and businesses alike in the CCIs, it is sadly likely that there will be ‘scarring effects’. CCIs workers that have been made unemployed due to COVID-19 will seek employment in other sectors. Where these workers are permanently lost from employment in the cultural and creative industries, they will represent an enduring diminishment in the skills and knowhow of the sector, making it less likely that it will be able to recover previous levels of economic performance.
3.3 ECONOMIC LOSSES AT DOMAIN AND SUB-SECTOR LEVEL

While the impact of COVID-19 has been uneven across the world (e.g. China and New Zealand suffering much less sharp falls in CCIs activity than elsewhere), it has also been uneven within the different components that collectively make-up the cultural and creative industries.

Cultural domains in which physical audience / visitor activities at venues and sites are prevalent and in which remote working is less feasible (e.g. Performance and Celebration and Cultural and Natural Heritage) have suffered the biggest economic losses. For instance, data for the USA suggests that half of all the estimated 2.8m CCIs job losses in the country between April and June 2020 were in ‘Fine and Performing Arts’ (Florida and Seman, 2020).

While the economic declines reported for cultural and creative sub-sectors with these characteristics are large, it should be remembered that some of these sub-sectors (e.g. Museums, Heritage) typically make relatively modest direct economic contributions compared to other domains that have been much less COVID-19 affected (e.g. Design and Creative Services, and Audio-visual and Interactive Media). Equally, it should also be acknowledged that activities such as theatre, museums and heritage have a broader economic impact as they are an important part of the tourist ‘product’ of many cities and regions, acting as a trigger for visits and tourist expenditure that takes place in the wider economy, particularly in the hospitality sector.

Some sub-sectors that are traditionally strong performers in direct economic impact terms (e.g. live music and cinema) have been severely COVID-19 affected. But the broader general pattern, whereby the impacts of the COVID-19 pandemic are more severe in the cultural domains that generate less direct economic impact, explains an apparent paradox in the data. That is, the evidence at sub-sector or domain level often reports very sharp falls for individual CCIs sub-sectors (because studies are more frequent for the most affected sub-sectors), but more modest overall falls are reported in the evidence that relates to the cultural and creative industries as a whole.

Finally, a wide variety of metrics, typically also denominated in different ways, have been used by the individual country and CCIs sub-sector-specific studies. This means that it is not possible to make structured comparisons at cultural domain or sub-sector level from the studies reviewed.

SNAPSHOTS PER CULTURAL DOMAINS AND SUB-SECTORS

The following examples provide standalone key facts of the negative economic impact of the pandemic for each of the cultural domains and sub-sectors.

It should be noted that studies covering the economic impact of the crisis on CCIs in the Africa and Asia and the Pacific regions have been less frequent during the study period, which limits the geographic coverage of the following examples:
MUSEUMS

- In April 2020, it was reported that three out of five museums in Europe were losing "an average of €20,300 a week due to closure and travel halt". While this value varies based on the type and location of the museum, many have reported a loss of income of 75 to 80%. Larger museums and those based in touristic areas are the ones reporting higher losses (NEMO, 2020).
- National statistics from the UK highlighted that 56% of jobs in the museums, libraries and other cultural activities sectors were furloughed from the start of the scheme in June 2020 up to 31 July 2020 (Hutton, 2020).

PERFORMING ARTS AND MUSIC

- In April 2020, a German study forecast that under a severe scenario for the remainder of the year, the performing arts nationally would suffer a 75% fall in turnover as compared with 2018 (the last year for which data is available). This is expected to be the most dramatic loss of any creative sub-sector in Germany (German Federal Government’s Centre of Excellence for the Cultural and Creative Industries, 2020).
- USA data also indicates that performing artists have suffered high rates of unemployment. While the US unemployment rate was 8.5% in September 2020, it was 55% for dancers, 52% for actors, and 27% for musicians.
- In Australia, employment in creative and performing arts activities reduced by 30% between 14 March and 18 April 2020 (ILO, 2020).
- According to the Finnish Employment Service Statistics of the Ministry of Economic Affairs and Employment, in the second quarter of 2020, the number of job seekers in the arts was already 57% higher than in the previous year.
- A study carried out on the music sector in South Africa shows that only 6% of respondent businesses could continue to pay all employees. Most organisations surveyed had to resort to severe measures such as terminating short term contracts (23%) or cutting employee salaries (18%) (South Africa Cultural Observatory, 2020).

VISUAL ARTS

- Across the South and Central American region, it is estimated that 53% of crafts organisations experienced a decrease in revenue of more than 80% in 2020 (MERCOSUR et al., forthcoming 2021).
- A study on the impact of COVID-19 on the 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 (Art Economics and Art Basel, 2020).
- American artists lost an average of $21,500 each in creativity-based income in 2020 ($50.6 billion, nationally) (Americans for the Arts, 2020).
- A survey in Panama found that 86% of those working in the visual arts suffered some income loss following the pandemic (Saravia et al., 2020).
- An industry survey found that art galleries in France experienced losses of €84 million in the second quarter of 2020 (OECD, 2020).
BOOKS

• Due to the closure of book shops, the global book market is expected to contract from $92.8bn in 2019 to $85.9bn in 2020 (OECD, 2020).
• Expected turnover losses in Germany between April and December 2020 for the book market were estimated at between €2.5bn (19% of annual turnover) and €4.5bn (34% of annual turnover).
• Data from the National Chamber of Publishing in Mexico indicate that book sales went down by 26% in 2020 (Camara National de la Industria Editorial Mexicana, 2020).

AUDIO-VISUAL AND INTERACTIVE MEDIA

• In mid-March 2020, the global loss in cinema box office revenue stood at around $5bn, with the closure of 70,000 cinemas in China contributing to this. With this loss growing to $17bn by the end of May, box office data in August 2020 in the USA revealed a 76% decrease in revenue compared to 2019 (OECD, 2020).
• The German Federal Government’s Centre of Excellence for the Cultural and Creative Industries in April 2020 expected turnover losses between April and December 2020 for the broadcasting industries to be between 10% (€1.1 bn) and 17% (€1.9 bn) of their annual turnover.
• The National Chamber of the Film Industry in Mexico reported that 10.5 million cinema tickets were sold between 25 March and 15 November. In 2019, over the same period 261.5 million tickets were sold – the 2020 figures therefore represent a spectacular fall of 96% (Gutierrez, 2020).

DESIGN AND CREATIVE SERVICES

• In July 2020, EY reported on Italy and Spain and estimated that in both countries the COVID-19 crisis may reduce revenues in the fashion industry by 35-40% by the end of 2020.
• In March 2020, it was reported that over 1,000 garment factories in Bangladesh have had orders cancelled worth roughly $1.5 billion due to the pandemic (Devnath, 2020).
3.4 DISTRIBUTION OF ECONOMIC IMPACT ACCORDING TO EMPLOYMENT STATUS AND OTHER FACTORS

EMPLOYMENT STATUS

One of the defining features of the cultural and creative industries is the prevalence of self-employment. For example, an OECD report in 2020 stated that 48% of workers in the sector in the Netherlands and 46% in Italy in 2018 were self-employed (OECD, 2020). One study even placed the proportion of the self-employed in Brazil’s cultural and creative industries as high as 73% (Centro de Desenvolvimento e Planejamento Regional da Faculdade de Ciências Econômicas, 2020), as did a separate study on the sector in Senegal (HEVA Funds, 2020).

The prevalence of self-employment in the CCIs reflects the preponderance of project-specific and short-term assignments in the sector. Freelance and self-employed workers tend to have fewer employment rights and can have employment terminated more swiftly than contracted employees. Similarly, the financial support provided by some governments around the world to the cultural and creative industries has often struggled to reach the self-employed and provide them with the same levels of assistance provided to employees in the sector.

Consequently, one hypothesis would be that when organisations are seeking to reduce costs – as COVID-19 has necessitated for many – contracted freelancers and other self-employed workers will be first in the firing line.

The studies reviewed for this report do indeed provide evidence that supports the hypothesis that freelancers and the self-employed have been the hardest hit by the COVID-19 pandemic within the cultural and creative workforce:

- Preliminary data from a study focusing on Latin America reported that 64% of freelancers in the CCIs had lost more than 80% of their income in 2020 (MERCOSUR et al., forthcoming 2021).
- A study on 260+ cinemas and film festivals in the UK revealed that in April 2020, most commercial cinemas (69%) were continuing to pay their salaried staff, but “only 31% were continuing to pay freelancers and casual staff” (Independent Cinema Office, 2020).
- A study on the impact of COVID-19 on museums in Europe found that in April 2020, 3 out of 10 museums had put on hold contracts with freelance workers and 3 out of 5 museums had entirely stopped their volunteer programmes (NEMO, 2020).
- The German Federal Government’s Centre of Excellence for the Cultural and Creative Industries (2020) has reported that self-employed, freelancers, marginal employees and “mini-jobbers” within the CCIs have been the groups affected most by the crisis.

The projections in Figure 6 equate to around three-in-seven of the freelance CCI workers in the UK at the start of 2020 becoming unemployed during the year and around one-in-fourteen of employed CCI workers losing their jobs over the same period. Or, to express this another way, freelance CCI workers had approximately a 43% probability of unemployment in the UK in 2020, while employed CCI workers had about a 7% risk of enduring the same fate over the same period.
In addition to freelancers and sole traders, in many countries across the world informal working is a hugely important, occasionally dominant, component of the CCIs workforce. Estimating the impact of the COVID-19 pandemic on this group of CCIs workers is particularly challenging and it is not surprising that there was only one credible study that contained estimates of this impact. Preliminary findings from the joint MERCOSUR, UNESCO, BID, SEGIB and OEI study (forthcoming, 2021) reported that 67% of informal workers in the CCIs in South and Central America experienced more than an 80% reduction in income in 2020, an even greater proportion than for freelancers.
GENDER

The studies on the economic impact of the pandemic on the cultural and creative industries reviewed for this report focus very little on the gender impact. This reflects a wider lack of statistics that enable the tracking of gender equity across the CCIs (Conor, 2021).

One sub-national study conducted by the Basque Observatory of Culture (Spain) and published in May 2020 reported that the proportion of women working in the cultural and creative industries increased by 2 percentage points (from 56% to 58%) after the first months of the pandemic in Europe. Thus, although in absolute terms more women in the sector may have been affected, the impact, in relative terms, may have been worse for men. However, the same study reveals that there are more women than men in the lower income groups and the pandemic seems to be increasing this trend. Before the pandemic, 68% of people earning less than €20,000 euros a year were women, whereas this percentage has risen to 70% during the crisis, indicating that although women remain more in the sector, they may do so in less well remunerated positions.

Other studies and economic models that have looked at the wider gender impact of the COVID-19 crisis across the whole economy tend to report that women in employment are worse affected than men (McKinsey Global Institute, 2021). According to PwC’s Women in Work study (2021), the COVID-19 pandemic is hitting women’s jobs harder in OECD countries due to existing gender inequalities and the fact that women’s jobs are clustered in highly disrupted sectors. The study also foresees that progress towards gender equality in the workplace could be reversed as a result of the crisis. A report from UN Women (2020) corroborates the fact that women’s livelihoods tend to be disproportionally impacted by the pandemic, with a widening of the gender poverty gap foreseen in the coming years across the world.

RACE AND ETHNICITY

In many countries, information is not collected on demographics such as race or ethnicity and, across the studies reviewed, there is very little evidence on the potential differential impact of the pandemic on workers in the cultural and creative industries according to race and ethnicity. However, one study did find that black, indigenous, artists of colour (BIPOC) in the US experienced higher rates of unemployment than white artists due to the pandemic (69% vs. 60%) and lost a larger percentage of their 2020 income (61% vs. 56%) (Americans for the Arts, 2020).

18 For instance, McKinsey’s global labour market model estimated in July 2020 that “women’s jobs are 1.8 times more vulnerable to this crisis than men’s jobs”.


GEOGRAPHY

The evidence reviewed strongly suggests that the absolute reported economic losses are concentrated in the major centres of CCIs activity:

• Indeed, the concentration of creative jobs and businesses in megacities, such as New York, Los Angeles or London, results in severe economic losses in these locations, as reported by the OECD (2020). Research by Oxford Economics (2020) supports this conclusion – as over half (51%) of the GVA contraction that they forecast within the UK’s cultural and creative industries was attributed to London. Similarly, research found that the largest absolute losses within the CCIs in the US have occurred in New York and Los Angeles.

• More generally, losses in the US have been most focused on urban, rather than rural, areas. “The 53 metropolitan areas with populations over 1 million are estimated to account for more than three-quarters (80%) of total estimated losses in sales and two-thirds (68%) of all estimated job losses in creative industries across the United States” (Florida and Seman, 2020). Similarly, a study carried out in Panama found that CCIs workers in cities reported bigger impacts that those elsewhere (Saravia et al., 2020).

Figure 7 illustrates studies which estimate that around one-in-four of all jobs lost in the CCIs in the UK in 2020 were lost in London, while one-in-ten lost in the USA over the same period were in New York, with almost the same number disappearing in Los Angeles. London is the UK’s dominant cultural centre. As the USA is a much larger country than the UK, no city culturally dominates the USA in the way that London dominates the UK – but New York and Los Angeles are two major cultural centres nonetheless. The CCIs have grown through vibrant clusters of activity – with London, New York and Los Angeles among the preeminent global centres in this regard. The diminishment of these clusters over 2020 risks undermining the future growth potential of the CCIs.
FIG. 7 ESTIMATED CCIs JOB LOSSES IN LONDON, NEW YORK AND LOS ANGELES AS A PROPORTION OF TOTAL CCIs JOB LOSSES WITHIN RELEVANT COUNTRIES, 2020

SOURCES: Florida and Seman (2020); Oxford Economics (2020).
4. DIGITAL ADAPTATION ACROSS THE CULTURAL AND CREATIVE INDUSTRIES

Faced with the magnitude of the impact of COVID-19 on the cultural and creative industries, of which the estimates in terms of lost revenue and jobs put forward in the previous sections are only one facet, the intensification of the consumption and production of digital cultural content, mainly as a result of the impossibility of congregating and occupying physical cultural spaces during the pandemic, is one of the most widespread adaptations in the sector, both among its audience and among its producers. This presents a host of both opportunities and challenges for the cultural and creative industries. But being able to adapt to producing and distributing content and experiences to audiences digitally has been an easier task for some sub-sectors in the cultural and creative industries than others.

In particular, the disruption caused by the pandemic in the audio-visual industries has simply supercharged trends that were already well established and underway pre-COVID-19. In particular, this is the challenge posed to established broadcasters and Pay-TV networks by the newer Over The Top (OTT) global streaming services. Behind the scenes, major consolidation between established media and telecommunications conglomerates has been fuelling industry re-structuring (and continuing to pour billions more into content production), as everyone else struggles to compete with the likes of Netflix, Amazon, TenCent and Disney (Pogorel and Preta, 2020). The trajectory is fixed in this regard; there will be no going back to a pre-OTT world.

The same cannot yet be said of much of the digital adaptation in the other cultural domains, for a variety of reasons. Digital production and distribution in museums, heritage, theatre, opera, dance, live music and festivals has a much more recent history and weaker roots than in games, recorded music, TV and film. With a few notable exceptions, the business models are not proven for much of the activity that has been witnessed during the pandemic. In many cases, organisations have extended into digital as an urgent ‘public good’ commitment at this very difficult time, and / or to maintain connections with their existing audiences and supporters, so that they are ready to return to the world of in-person, physical experiences at venues and sites once lockdown and social distancing regulations have been lifted. In other words, at this point in time it is hard to say quite how much of the digital innovation that we have witnessed from organisations in the CCIs outside of the audio-visual industries will ‘stick’ in the medium to long term.

This closing section therefore looks at these contrasting trajectories. The first section presents data on the increasing digital consumption of audio-visual media and the second section provides a series of mini case studies as to how organisations across the globe in the other cultural domains are enhancing their use of digital to either reach new audiences or keep in touch with existing ones.
4.1 SHIFTS IN DIGITAL CONSUMPTION PATTERNS IN THE AUDIO-VISUAL AND INTERACTIVE MEDIA

Interactive media (e.g. computer games, social media) and the wider audio-visual industries (e.g. film, TV, recorded music) have again fared better in terms of the shift to digital than other domains and sub-sectors. This is because some are inherently ‘born digital’ cultural experiences, while others have benefitted from the existence of well-established digital distribution platforms and aggregators (e.g. Netflix, TenCent, Spotify, etc.), which are not present in the other cultural domains.

This is not to say that every part of the value chain nor every type of organisation within the audio-visual industries has fared so well in terms of digital adaptation:

- Cinema exhibition, as an inherently physical experience, has been decimated. The prolonged shutdown has also meant that film distributors, which have for a long time sought to reduce the exclusive ‘window’ of time available to cinema exhibitors for theatrical distribution, have finally been able to move to releasing new titles straight to digital. It is in some doubt as to whether exhibitors will be able to re-impose the exclusivity of their ‘window’ once the pandemic has eased (Kafka, 2020).
- Many national broadcasters saw a welcome boost to ratings of their output during the first few months of the pandemic, particularly in news, though in some countries viewing has since subsided to pre-pandemic levels (Johnson, 2020). Equally, national broadcasters are also struggling to get a foothold in the new direct-to-consumer reality of the streaming market. In some global regions, this is pushing national broadcasters to seek alliances as they look to compete with the major global players (IABM, 2020).

MAJOR VIDEO AND AUDIO STREAMING PLATFORMS

Companies such as Netflix, Amazon, Disney+ and Tencent Video have all seen a substantial increase in video and audio consumption, especially in Western Europe, North America and the Asia Pacific region, and are increasingly eclipsing traditional pay-TV providers. Growth in audience awareness and use of OTT (‘over the top’) streaming services also extends well beyond this elite group:

- In India, paid subscriptions on OTT video platforms grew 31% in just four months during the first wave of the pandemic (April to July 2020) (Shahidi, 2020).
- Indonesian media streaming platform Vidio reported a 225% growth in consumption amid the COVID-19 pandemic as total online video weekly streaming minutes on mobile grew 60% in aggregate across Indonesia, Malaysia, the Philippines and Singapore between 20 January to 11 April 2020. Another regional player Viu (based in Hong Kong, China) reported a similar surge in online streaming: a 274% increase amid the COVID-19 period (Farveen, 2020).
- At the height of the pandemic in China, subscribers to Mango TV and Tencent Video increased by 708% and 319% respectively (Wen, 2020). iQIYI, already one of the biggest streaming platforms in China, welcomed 12m new subscribers in the
first quarter of 2020, a 23% increase year-on-year (Sina Finance, 2020).

- In the UK, by the end of 2020, there were over 32m subscribers to the three most popular video streaming services (Netflix, Amazon and Disney+), more than double the number of subscribers to satellite and cable pay-TV providers such as Sky and Virgin (Sweney, 2020).
- In October, Spotify reported 29% and 27% year-on-year global growth for its Monthly Active Users (MAUs) and premium subscribers respectively, both exceeding prior company forecasts for the year. However, not even Spotify was totally unaffected by the pandemic as advertising revenues for their free service declined in the second quarter of 2020 before returning to growth in the third quarter (Stassen, 2020).

COMPUTER GAMES

As the most well established born digital cultural form, computer games – whether console, PC, or mobile – have gone from strength to strength during the pandemic, as the snapshots below illustrate:

- Steam, an online digital games service, experienced over 23 million concurrent players during March 2020, beating all previous records (Wilde, 2020).
- In spring 2020, the number of users playing mobile games increased by 84% compared to the spring season 2019 in the Republic of Korea (Euromonitor Consulting, 2020).
- Sales of Nintendo’s Switch console helped profits to more than triple in the half year to end of September 2020. Nintendo raised its forecast for Switch sales in the year ending March 2021, expecting to sell 24 million consoles, up 26% from a previous forecast of 19 million (Espiner, 2020).
- Animal Crossing: New Horizon sold five million digital copies in its first month (March 2020), breaking the console game record for most digital units sold in a single month. The game, whose popularity is underpinned by the soothing effect it has on players and the chance for them to interact with others, sold 13.4m units in its first six weeks, which coincided with the height of the first wave of the pandemic (Zhu, 2020).

WHAT ABOUT THE DIVERSITY OF DIGITAL AUDIO-VISUAL CONTENT DURING THE PANDEMIC?

The main international digital platforms have been well placed to benefit from increased audience demand during the pandemic. Niche streaming services, focused on more specialist and / or culturally diverse content, also appear to have prospered since the onset of the COVID-19 pandemic.
By the fall 2020, the international independent film streaming service MUBI (with offices in London, New York, Kuala Lumpur and Mumbai) reported that their subscribers had doubled and the number of films watched by users had tripled (Erbland, 2020).

GagaOOLala, the first LGBT-focused OTT video streaming platform in Asia, launched its global service in May 2020. It performed particularly well in its home market of South and Southeast Asia, due to the restriction of outdoor activities and the lack of competitors regionally (Mia, 2020).

Bilibili, a Chinese video sharing site themed around anime, comics and games, saw its number of monthly active users increase in the first quarter of 2020 by 70% year-on-year together with a 134% year-on-year growth of paid users (Yi guan cai jing 异观财经, 2020).

The French documentary specialist streaming service Tenk saw subscriber numbers jump 33% during the first two months of lockdown in France, past their small breakeven threshold of 10,000 subscribers (Ferro, 2020).

While mainstream cinema exhibition has been hit badly by either the total closure or reduced capacity of cinemas, film festivals around the world - the mainstay of independent and specialist films - have also struggled. New research carried out by BOP Consulting for this report shows that of 60 major international film festivals across the world (see Annex 1 below), almost one in four of the festivals (24%) were sadly cancelled. More positively, 59% of those festivals that were not cancelled were able to adapt their programmes to organise either a hybrid on-site and digital programme, or a completely digital programme.19

The digital shift nevertheless continues to raise the issue of the diversity of content and also of equal access to it, as long as the digital gap persists.20 Examples of business model innovation in adapting to the digital environment can be found in different branches of the cultural and creative industries and in different regions, including Africa, which is the region with the lowest internet use (28%) (ITU, 2019). A series of mini case studies follow to provide an inspiring range of possible approaches.

---

19 The 60 international film festivals include 46 festivals accredited by FIAPF (Fédération Internationale des Associations de Producteurs de Films - the International Federation of Film Producers Associations) and other major film festivals across the world that were selected based on their attendance levels and status as an Academy Award qualifying festival.

20 According to the International Telecommunications Union Report Measuring digital development: Facts and figures 2019, some 4.1 billion people are now online, but in developing countries women’s Internet use is falling behind. ITU estimates that over half of the total global female population (52 per cent) is still not using the Internet, compared to 42 per cent of all men.
4.2 DIGITAL INNOVATION ACROSS CULTURAL AND CREATIVE INDUSTRIES

By way of conclusion, the series of mini case studies presented below offers a snapshot of innovative digital models that have emerged in four distinct cultural domains.

MUSEUMS

As the COVID-19 pandemic continues to unfurl, museums and heritage sites across continents are either still closed or are welcoming far fewer, and less geographically diverse, visitors. And with travelling to and from many countries likely to remain limited in 2021, virtual tours, digital exhibitions, special podcasts and even video games, are emerging as alternative solutions to experiencing heritage. While professionals in the sector agree digital cannot substitute traditional site visits, they also point to how it can offer new, complementary benefits.

Across the world major national museums and heritage sites, including The Metropolitan Museum in New York, The Front Palace in Bangkok, and The National Museum of Modern and Contemporary Art in Seoul, to name a few, had already started rolling out virtual tours well before the pandemic, but their communications teams are now working hard to encourage audiences to try these out. Often built through platforms such as Verizon and Google Art and Culture, digital collections provide very different learning experiences. Objects can be observed in stunning detail, impossible to achieve even through actual museum visit, and small pop-up questionnaires engage users to actively learn about collections and cultures.

The Municipality in Bologna, Italy, in partnership with a group of museums that includes the Medieval Civic Museum, Bologna Museums Institution and the Palazzo Poggi Museum, has created a video game called ‘WunderBO’. The game encourages audiences to explore Bologna’s cultural heritage in a playful and creative way and to eventually become promoters of Bologna’s cultural heritage themselves. As they play, users embark on a virtual journey built through puzzles, curious facts, hidden objects and discoveries from the Medieval Museum and the Museum of Palazzo Poggi. The ultimate goal of the game is to create a “Wunderkammer”, a cabinet of wonders, a name given to the earliest museums. As players attempt to create these cabinets of wonders, guided by three well-known historical personalities from Bologna’s past, they discover key pieces of the collections by visiting the two museums and unlocking the missing contents with augmented reality. Users can also connect to other players and share their progress via social media, thereby sharing with their followers some of the cultural heritage and history of Bologna. Co-financed by the European Commission’s Horizon 2020, WunderBO is now a case study reference for digital heritage.


In the Arab Gulf States, Emirati sisters Manar and Sharifah Alhinai launched The Khaleeji Art Museum, a digital museum experience that introduces visitors from all around the world to artists of the region, with a focus on female artists. With a strong focus on gender, the museum is also managed by, and the exhibitions are produced by, an all Arab female team to increase the participation of women in the arts in the region.

Witnessing the growing popularity of digital exhibitions, Manar and Sharifah decided to set up an entirely digital museum experience, as opposed to a physical one. This means that the museum can be accessed globally and, in line with its mission, reach audiences in all geographical areas. It also meant that the museum could be set up much more quickly and timely, therefore responding to pressing needs. Its first virtual exhibition, for example, Khaleejis in the Time of Corona, features artists and photographers sharing their experiences through art of the COVID-19 crisis, quarantine and the “new normal”, to shed a light on the life of Khaleejis (those who are from the Arab Gulf States) during the pandemic.

PERFORMING ARTS, MUSIC AND DANCE

Bans on gatherings in large groups and social distancing measures mean that huge numbers of public-facing, live performances and cultural parades have been postponed since the pandemic started. Nevertheless, cultural organisations across the world have been working around the clock to continue to bring life and creative expression into people’s homes through alternative, digital ways.

Amidst the variety of digital options, live streaming special content is proving popular amongst theatres, opera houses and concert halls. In Latin America, the National Opera House in Santiago del Chile and Teatro Colón in Buenos Aires have launched particularly successful live streaming programmes, under the leadership of their first women Directors, Carmen Gloria and Maria Victoria. The Opera House in Santiago has created “Municipal Delivery”, broadcasting live performances, talks and workshops up to four times a week. Teatro Colón set up “CultureAtHome” (CulturaEnCasa, in Spanish), a series of live performances broadcast every Sunday night. As of June 2020, Municipal Delivery had already held 27 virtual live events, attended by over 260,000 people, while CulturaEnCasa had reached more than 1.5 million views. While recognizing the limitations of these digital streaming performances, the Directors of the two venues, recognise these special programmes might eventually lead to positive outcomes, including breaking geographical barriers and diversifying the audience.

Elsewhere, producers and artists have been thinking hard about how to get recreate more of the ‘live’ feel to filmed and streamed events. Les Ballets de Monte-Carlo’s video platform offers audiences the chance to watch shows using multi-view camera technology. This was originally developed for sports broadcasting and enables viewers to control what they see, giving them more agency and allowing them to focus on the details that they are interested in.

Similarly, in the Republic of Korea, two of the country’s largest media and technology companies have partnered to create ‘Beyond LIVE’. This is an online streaming and concert service which offers real-time customised performance for full-length and full-sized arena shows in which there is no in-person audience. It 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 ability to synchronise global fans’ virtual “lightsticks” and cheers with the live stream concert in real-time. In October, a BTS show (the world’s most popular K-Pop band), sold over 900,000 paying tickets for fans from over 190 countries.


Of course, not all artists can play arena-sized shows and other digital platforms have been created to cater for musical artists with much smaller followings. An example is Japan’s newly launched Unitive, a direct-to-audience app, purposely designed to support musicians during the pandemic. Unitive’s model is simple: artists can establish their own virtual community and then directly stream their performances to audiences who join their community. Both artists and users pay a fixed amount per month to access the service, and artists then earn a percentage from the fee paid by each user who is subscribed to their community, thereby securing a stable monthly income and keeping their connections with audiences through steady content flows. The platform registered 100 virtual communities only two months after its launch and is rapidly growing.

Unitive’s model is similar to that of Patreon’s, another direct-to-audience and US-born platform. Patreon was already gaining ground before the pandemic, but since March 2020 the platform has witnessed a rapid surge in the number of artists reaching out to their audiences. While it is clear that these platforms have gained particular momentum because of artists inability to perform in venues, they might also mean the beginning of a new, long-lasting chapter in artist-to-audience engagement.

VISUAL ARTS AND CRAFTS

Largely relying on big events, fairs, biennales and gallery visits, the international Visual Art and Craft market was hit hard by the pandemic, but quickly moved to digital to offset the blow and grow resilience. The sector is transforming rapidly as a result: social media is now ranked as the sector’s third most important sales channel, ahead of fairs. According to insiders, these trends are not just temporary responses to the pandemic but they are actually here to stay as effective complementary ways to deepen interest and interaction in the sector in novel ways and keep art and design-lovers engaged all year round.

In Hong Kong, 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. In total, 235 exhibitors took part, showing more than 2,000 works. Organisers commented this inaugural edition was a real “leap of faith” for both Art Basel and its exhibitors, but one that brought galleries, collectors and artists together during this time of social distancing, and ultimately brought the works due to show at Art Basel Hong Kong to the attention of a worldwide audience of over 250,000 visitors. 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.

UNESCO’s Creative City of Kanazawa in Japan is world famous for its traditional crafts, including the characteristic “Kinpaku”, the ornamental gold leaf sheet that is used for a wide range of handicrafts, kimonos and food, as well for decorating temples, shrines, Buddhist altars and instruments. Beyond the gold leaf, craft workers in Kanazawa also specialise in specific ceramics, lacquerware, fabric dyeing, metal work, bamboo and woodcrafts, Japanese dolls, paper and glassworks. The city is now a growing tourist destination and these makers usually showcase their handicraft in the local markets all year round in addition to benefitting from the local Craft Museum and several craft fairs. To help local craft artists get through the hardships brought about by COVID restrictions on physical activities, the City launched a special, digital craft exhibition. The exhibition and the online website, available in five languages including English, French and Chinese, are being gradually updated with pictures of artworks, the personal profiles and shops of the artists and information on solo exhibitions. In addition to showing photos of traditional Kanazawa crafts, the digital exhibition features a wide range of videos that introduces artists, artisans and curators explaining the rarely seen craft techniques and processes.


In Uganda, Kampala Art Biennale, a biannual show of contemporary art from Africa, 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. Through chatrooms and webinars the team also allowed for interaction with the artists and networking among audiences. This virtual biennale is now being turned into a virtual archive and will remain accessible beyond the original exhibition dates, making it possible for people all over the world to continue to revisit the pan-African fair.

SOURCE: Kampala Art Biennale’s official website: http://kampalabiennale.org/.
BOOKS

With the rise of e-books and commercial digital platforms, independent bookshops and libraries have long faced big challenges. Yet the restrictions imposed by lockdowns have exacerbated these to the extent of triggering strong reactions in the sub-sector, which may lead to new models and positive changes in the medium to long term.

In the US and the UK Bookshop.org, the online platform launched to safeguard the independent literary community is booming. Acclaimed by independent bookstores as “revolutionary”, Bookshop.org enables independent shops to set up their own virtual shopfront on its website. Orders can be made through the platform, which manages both customer service and shipping, yet the stores receive the full profit margin - thirty-percent of the cover price - from each sale. According to founder Andy Hunter, the pandemic certainly catalysed the rapid uptake of Bookshop, which took off exponentially, rising from just over 250 bookshops to over 1,000 within a year, generating more than US$11.5m for independent bookshops across the US. What seems clear to Hunter is that the pandemic triggered people’s desire to support independent shops, including bookshops. Following explicit requests from British customers and independent bookshops, Bookshop has also launched in the UK, with further plans to scale to different parts of the world.

Meanwhile in Paris, France, the iconic English-language bookshop **Shakespeare’s and Company** launched a new membership scheme during the pandemic which offers curated book selections and possibilities to take part in book clubs, among other benefits. Open since 1922, Shakespeare and Company has a long history of promoting and supporting Anglo-Saxon literature in continental Europe and the rest of the world. The bookshop was already experiencing major difficulties before COVID-19, but the lockdown seriously threatened its survival. Recognising the important role of bookshops in fostering learning, gathering people and building communities, the owners decided to test their ability to bring people together via digital means, as well as improving their online catalogue and e-commerce. With supporters signing up from across the world, the scheme has been a success so far and other independent bookshops have since also launched membership schemes.


Libraries are also changing the way they think of public interaction. In Nairobi, Kenya, **Book Bunk**, a social impact firm working to restore some of Nairobi’s iconic public libraries, is now fully focusing on introducing technology into all libraries in the city, from access control to collections management, to online catalogues as well as digital skills training for librarians and library users. Digital upscaling had always been an important part of Book Bunk’s agenda but since the outburst of the pandemic, going digital has become an absolute priority, and the process is being carried out in much quicker and focused way.

SOURCE: Heva Funds (2020).
ANNEX 1: TECHNICAL NOTES

METHOD FOR DEFINING THE CCIS LABOUR FORCE USING LINKEDIN DATA

There are various ways in which users can be classified within LinkedIn. First, LinkedIn has 148 industry codes to classify the economy which have the same function as Standard Industrial Classification (SIC) codes do within governmental statistics. Most of the cultural and creative industries are well covered by these codes.

We therefore used LinkedIn industry codes to implement UNESCO’s definition of the cultural sector as contained in the 2009 Framework for Cultural Statistics. Five of the six cultural domains were defined using the following LinkedIn industry codes:

- **Performance and Celebration**: Performing Arts, Music.
- **Visual Arts and Crafts**: Fine Art, Arts and Crafts, Photography.
- **Audio-visual**: Broadcast Media, Motion Pictures and Film, Computer Games, Internet, Online Media, Media Production.

The one exception to this process was Cultural and Natural Heritage. The only LinkedIn industry code that could exclusively be assigned to this domain was ‘Museums and Institutions’. However, this domain covers a much wider range of activity than just museums, such as historic houses, sites and other heritage attractions, zoos, aquariums and botanical gardens. After some investigation, it became clear that much of this activity in LinkedIn is contained within the very broad ‘Leisure, Travel and Tourism’ industry code, which contains a large number of workers globally.

For this reason, for Cultural and Natural Heritage, the LinkedIn definition implemented was to use the industry code ‘Museums’ and then supplement this with two searches across the ‘Leisure, Travel and Tourism’ industry code.

The first search was based on skills relevant to the domain, as identified by LinkedIn users:

- **Skills**: Conservation, Interpretation, Exhibitions, Curation, Archiving, Education / Learning, Visitor experience, Science, Zoology / Biology, Botany / Horticulture.

As this search would not be able to identify workers in Cultural and Natural Heritage that work in more generic roles (e.g. people in marketing, finance, management, IT, security, etc.), a second search was run to identify Cultural and Natural Heritage workers by organisation / themes, as identified by LinkedIn users:

- **Organisations / themes**: museums, galleries, zoos, aquariums, botanical gardens, historic buildings (houses, palaces, castles / forts, sites of worship), historic sites / ruins.
The searches were then de-duped to make sure that workers were not being double counted across these two searches.

This three-part methodology for defining Cultural and Natural Heritage was sense checked against labour market data for Cultural Heritage in the UK obtained from the UK’s Office for National Statistics. The resulting LinkedIn numbers for the UK were broadly comparable with the ONS figures, suggesting that the method adequately captures workers in this domain.  

**METHOD FOR DERIVING A GLOBAL ESTIMATE OF THE ECONOMIC IMPACT OF COVID-19 ON THE CCIS**

Across the group of countries for which we have CCIs’ GVA and national GDP data, overall the losses in CCIs’ GVA were, on a weighted average basis, over four times larger than national GDP losses. [A weighted average means that the calculation gives weight to percentage changes within countries in line with the proportionate size of their CCI sectors. To further prevent large percentage falls within small countries distorting our calculation at the global level, we have applied this weighted average calculation only to countries within our sample with a nominal GDP value above US$200bn (i.e. the 20 countries in Figure 4)].

In deriving an estimate of global losses in CCIs’ GVA, we assume that this ratio between losses in the CCIs and losses national GDP holds true in general. This seems reasonable given that our sample includes seven of the ten largest economies in the world, the second largest economy in Africa, and collectively accounts for 61% of the global economy.

This loss ratio can then be applied to the value of the proportion of national GDP accounted for by the CCIs. Data on the proportion of national GDP accounted for by the CCIs in the 20 countries has been drawn from secondary sources, primarily OECD and Eurostat. The value of these proportions can be derived by applying the proportion to the nominal value of countries’ GDP (data on which has been sourced from the World Bank). An estimate of the global impact of Covid-19 on the GVA of the CCIs in 2020 can then be calculated by assuming that the same loss ratio between CCIs’ GVA and national GDP observed within the 20 countries in Figure 4, holds true for all countries for which the nominal value of CCIs’ GVA can be derived from these secondary sources (i.e. 152 countries).

---

21 The UK has a very high penetration of LinkedIn users compared to the national workforce so it is a good country to use as a ‘test’ to validate the method. Clearly, the method outlined above for all the domains still has the limitation that it relies on users being registered on LinkedIn in the first place.
HOW DOES THIS COMPARE TO OTHER ESTIMATES OF DIRECT IMPACT?

Two studies from the evidence review help us to further contextualise the US $750bn contraction that we estimate using the method described above.

The Olsberg SPI screen industries study, *Global Screen Production – The Impact of Film and Television Production on Economic Recovery from COVID-19* (2020), estimates that total direct revenues within this sector fell by US$62bn in the first six months of 2020. In the absence of data for the second half of the year, and disregarding some sporadic venue reopenings, equivalent losses over the second half of 2020 would create an annual reduction of US$124bn in the global screen industries. This should not be taken to imply that the screen industries contributed 17% of the global CCIs’ GVA loss in 2020, as the US$124bn screen industries figure relates to *revenue* and not GVA (which is always less than revenue). However, a global fall in direct revenues on this scale within the screen industries helps us to appreciate the plausibility of a US$750bn fall in global GVA from across the CCIs as a whole.

Similarly, a report from the German Federal Government’s Centre of Excellence for the Cultural and Creative Industries (2020) produced national economic estimates based on differing COVID-19 scenarios. In a medium scenario, the CCIs would have experienced “turnover losses of approximately €21.7 billion or 12.7 percent of its annual turnover” by the end of 2020 and “€39.8 billion or almost 23% of the annual turnover” in a more severe scenario. As Germany accounts for approximately 3.5% of global GDP, the revenues losses estimated for the German cultural and creative industries are in keeping with an estimated global contraction of US $750bn as they would represent 3 to 6% of the global loss (depending on scenario).
SAMPLE OF CULTURAL AND CREATIVE INDUSTRIES EVENTS REVIEWED TO ASSESS DISRUPTION


**International film festivals:** Berlin International Film Festival*, Black Nights Film Festival, Busan International Film Festival*, Cairo International Film Festival*, Cartagena International Film Festival*, Carthage Film Festival, Cinedays (Skopje)*, CPH:DOX, DocAviv International Documentary Film Festival, Durban International Film Festival, El Gouna Film Festival, Eurasia International Film Festival (Astana)*, Festival de Cannes*, Festival de Cine Global Dominicano*, Festival del film Locarno*, FilmFestival Kitzbühel*, Gijon International Film Festival*, Guadalajara International Film Festival, Guanajuato International Film Festival, Hong Kong International Film Festival, Hot Docs Canadian International Documentary Festival, International Antalya Film Festival*, International Film Festival of India (Goa)*, International Film Festival of Kerala (Trivandrum)*, International Film Festival Rotterdam, Istanbul Film Festival, Jerusalem Film Festival, Karlovy Vary International Film Festival*, Kolkata International Film Festival*, Kyiv International Film Festival Molodist*, Listapad Minsk International Film Festival*, Mar del Plata International Film Festival*, Melbourne International Film Festival, Morelia International Film Festival, Moscow International Film Festival*, Motelx - Lisbon International Horror Film Festival*, Mumbai Film Festival*, Namur International Film Festival*, Noir in Festival (Como, Milan)*, San Sebastian International Film Festival*, Sarajevo Film Festival, Shanghai International Film Festival*, Singapore International Film Festival, Sitges International Fantastic Film Festival of Catalunya*, Sofia International Film Festival*, South by Southwest, Stockholm International Film Festival*, Sundance Film Festival, Sydney Film Festival*, Taipei Golden Horse Film Festival, Tirana International Film Festival, Tokyo International Film Festival*, Toronto Film Festival*, Transylvania International Film Festival*, Tribeca Film Festival, Valencia International Film Festival, Cinema Jove*, Venice International Film Festival*, Warsaw Film Festival*, Yamagata International Documentary Film Festival.

*denotes FIAPF accredited film festival.

**Design Weeks and events:** DesignTO Festival, Oslo Design Fair, Brafa Art Fair, Madrid Design Festival, Stockholm Design Week, Bogotá Design Festival, CIFF Guangzhou, Fuorisalone, Boston Design Week, Design REYKJAVIK, Design Shanghai, Design Miami/ Basel, Paris Design Week, Salone del Mobile, Helsinki Design Week, London Design Festival, Vienna Design Week, Venice Design Week, EDIT Napoli 2021, Dubai Design Week, ICFF, Design Miami / Podium 2020, Seoul Design Festival.
ANNEX 2: BIBLIOGRAPHY

*Denotes evidence that was included in the final review of 54 sources


Flood, A. 2020b. This is revolutionary: new online bookshop unites indies to rival Amazon. The Guardian, 2 November. https://www.theguardian.com/books/2020/nov/02/this-is-revolutionary-new-online-bookshop-unites-indies-to-rival-amazon (Accessed January 2021.)


The cultural and creative industries have been among the first sectors to shut their doors in response to the COVID-19 pandemic. They will also be among the last to reopen. This report aims to capture the scale of the global disruption caused by the spread of the virus. Building on an analysis of studies conducted across the world in 2020, it examines the economic impact and consequences of the pandemic on the cultural and creative industries, and explores digital innovations that have emerged in response to this unprecedented crisis.