

Belenioti, Zoe Charis (Zoi Charis)

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COVID-19 resilience via digital cultural heritage; Digital life in museums and festivals during the anthropause

Zoe - Charis Belenioti

International Hellenic University, Greece

14th km Thessaloniki, Nea Moudania 570 01 / University Campus, Kavala

Agios Loukas - 65404 Kavala

ORCiD: 0000-0003-3600-513X

E-mail: zoibelenioti@gmail.com

Abstract

The impose of lockdown anthropause massively affected tourism and particularly cultural tourism products. Digital cultural heritage served as a first aid kit amidst COVID-19 reshaping the deliverable experience. Nevertheless, the pandemic created new research streams, no study so far has reviewed digital resilience within museums and festivals. Drawing on a review of 76 papers, and multiple case study analyses, this paper presents three major streams revealing opportunities and problems attendant to social media and digital transformation as the modus operandi during the lockdown, and global best practices of museum and festival's reaction including Thessaloniki International Film Festival and MOMus. This study views COVID-19 as a disruptive event inaugurating a brand-new digital experience era. The study serves as a valuable classification and theoretical starting point for researchers and, second, as a roadmap on challenges and future research agenda directions of digital museum/ festival experience amid digital transformation in the post-pandemic.

Keywords: SARS-CoV-2 or COVID-19, social media, AR/ VR, museums, festivals, digital transformation, cultural tourism, cultural heritage, resilience

Biographical notes: Dr. Zoe (Zoi) Charis Belenioti is Adjunct Lecturer in Digital Marketing, Tourism Marketing, Social Marketing, Consumer Behavior. Her work, focusing on Digital Marketing, Digital Transformation, Cultural Tourism, Social Media, NPOs, Consumer Behavior, has been repeatedly cited ([h=7,i10=5](#)). In between her studies, she worked across Europe as Communications Specialist at the European Commission in Brussels (DG CNECT), the Principal Directorate of Communication of the European Patent Office in Munich, and for more than 10 years as Press Office Assistant at “Thessaloniki International Film Festival. She also was Principal Investigator at Social Inclusion Observatory, DG Public Health of Region Central Macedonia.

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INTRODUCTION

Apart from its educational value, museums have a beneficial contribution to the economy and tourism as a significant form of cultural tourism. However, the last three decades museums had to redefine their stakeholders, and their strategic approach applying marketing-oriented practices and Information Communication Technology (ICT) advances and introducing a new museum experience (Dijkmans, Kerkhof and Beukeboom, 2015; Belenioti and Vassiliadis, 2017; Belenioti, et al., 2017a; 2017b; Belenioti, et. al., 2019; Belenioti, et.al., 2019; Belenioti, 2020). Enabling the experiential notions of “Edutainment”/ “Arertainment” and “Disneyfication”, this new museum era presents two major characteristics: the application of marketing principles, and the integration of ICT and future internet applications, at strategic level setting the premises of Digital Transformation or Digitalization in cultural industry, respectively.

All in all, digital transformation using Web 2.0 & Web 3.0 tools such as social media or Future Internet and Internet of Things (IoT) enables the brand co- creation era. More specifically, under the umbrella of “digital transformation”, tourists and museum visitors are

now becoming “prod-users”. Using Future Internet and Smart Tourism applications within museums (RFID), Augmented Reality (henceforth AR), Virtual Reality (henceforth VR), Museum Kiosks) visitor communication cues increase brand engagement, museum satisfaction, brand equity enabling the co -creation. Moreover, digital transformation is a moderator factor of the Customer Experience era (Lemon and Verhoef, 2016; Stylos, Zwiegelaar and Buhalis, 2021;Buhalis, 2022) including tourism industry. Thus, to Lemon and Verhoef (2016), marketing scholars and practitioners should elaborate on the integral role of IT, and how new digital transformation tools such as robots, IoT sensors, mobile applications could optimize the customer service and boost visitor and customer engagement by delivering a unique memorable customer experience.

Particularly, to Buhalis (2020), the integration of hardware, sensors, data storage, big data process and analytics within the promising Ambient Intelligence delivers a new holistic experience. Interconnectivity and interoperability of smart technologies that provide a direct, dynamic, and ongoing personalization by synchronizing personal data and visitors' behavioral patterns is just a preview of the new facet of ICT, Future Internet harnessed by Internet of Things, Smart Tourism Applications and Big Data. BD, intranet reviews and eWOM Metadata, Web and text analytics, data mining and information retrieval based on the online consumers activity may optimize the targeting process by tracking better the tourist behavioral patterns (Stylos, Zwiegelaar and Buhalis, 2021).

Indeed, the widespread adoption of ICT, Web 2.0, social media (henceforth SM), along with the emergence of smart tourism technologies was the catalyst for unveiling the new museums experience followed by the digital transformation in tourism. Similarly, in cultural tourism context, such as museum or festivals, digital transformation harnessing either ICT, Web 2.0, social media, Big Data has reshaped the relationship between museums and visitors switching from business- to- consumer to consumer- to- consumer, or human – to human communication (Belenioti, 2020; Buhalis, 2020).

The outbreak of COVID-19 has massively embraced this new experience. Gretzel *et al.* (2020) support that technology served as catalyst for transformation including tourism industry. As Gretzel *et al.* (2020) report, COVID-19 connected the dots of e- tourism in many ways either via social media in which tourist escape from their quarantine by spreading eWOM posts about past or future trips, or via virtual tours and online museums visits.

Simultaneously, the emergence of COVID-19 led to a new literature. Thus far, recent attention has focused on the interdisciplinary aspects of COVID-19 from healthcare guidelines to business -oriented streams, such as sustainability in tourism or related industries in cultural tourism, like museums or festivals. Although several studies have examined the reaction of museums, no study so far has reviewed the stream of digital resilience in museums and festivals. This paper attempts to remedy this problem by examining the following research questions

- RQ1: Quo vadis both museums and festivals in the time of Corona?
- RQ2: How did digital transformation tools serve as brand awareness and brand engagement tool for museums and festivals during lockdown?
- RQ3: What are emerging research streams on the interplay among museums/festivals, COVID-19, and social media /digital tools?

The remaining part of the paper proceeds as follows: The second section reviews the impact of COVID-19 on consumer behavior, tourist behavior, business along with the research on tourism and cultural tourism. The third section is concerned with the methodology used for this study. The fourth section presents the findings of the study along with its discussion regarding the three key themes that paper examined. The last part concludes with limitations of the study, challenges & future research propositions.

LITERATURE REVIEW

SARS-CoV-2 or COVID-19 was firstly reported in December 2019, Wuhan China. Then, the alarming infection speed of the novel coronavirus has rapidly created the latest global pandemic. In less than 3 months, in March 2020 World Health Organization (WHO) declared

this virus a pandemic. As coronavirus cases surged due to dearth of medical treatment, lockdown and strict social distancing measures (local or global lockdowns, proactive or mandatory quarantine) constituted the only solution to cease the spread. Sigala (2020) remarks the differential nature of this “black swan” event given its global, profound and multidimensional impact at economic, societal, public health policy, business level.

Moreover, while tourism industry has been repeatedly denoting exceptional resiliency towards any recurrent economic, political crisis or disruptive events out-breaks (e.g., terrorism, earthquakes, Ebola, SARS, Zika) owing to its interconnectivity, vulnerability and seasonality nature, the breadth and intensity of COVID-19 has massively affected tourism, travel and mobility (Gretzel *et al.*, 2020; Sigala, 2020).

Besides the major economical and societal crisis followed by lockdown and COVID-19, COVID-19 have also caused severe demographic trends in fertility, mortality, economy, and migration (Lindberg *et al.*, 2020). In terms of fertility, while European Commission has been pointing that Europe’s working-age population is shrinking ([European Commission](#)), COVID-19 has exacerbated this tendency. Due to the pandemic uncertainty and pandemic related worries or the blurring lines, so far, about vaccines impact on the fertile age group of 30-39, many women postpone their reproductive intentions and fertility preferences (Lindberg *et al.*, 2020).

In addition to changes on demographics, coronavirus lockdown has inevitably emerged new consumer behavior patterns. Undoubtedly, this pandemic has revealed multifaceted questions about the meaning of life, life-resilience, trusting one another, socializing, mingling, bonding, working or even going to museums virtually via one PC, iPad or smartphone screen. Consequently, COVID-19 has triggered academia and industry (e.g. Deloitte, KPMG, Accenture) attention. Thus, a considerable amount of literature has been published regarding the impact of COVID-19 on changes in consumer behavior (Donthu and Gustafsson, 2020; Krishnamurthy, 2020; Sheth, 2020; Group *et al.*, 2021; Arzhanova, Beregovskaya and Silina, 2020; Mehta, Saxena and Purohit, 2020) and business – services operational shifts (Agostino, Arnaboldi and Lema, 2020; Donthu and Gustafsson, 2020; Wang *et al.*, 2020; World Tourism Organization (UNWTO), 2020; Frutos *et al.*, 2020; Gretzel *et al.*, 2020a; He and Harris, 2020; Krishnamurthy, 2020; Lazzerini and Putoto, 2020; Maditinos *et al.*, 2020; Sheth, 2020; Sigala, 2020; Course and Systems, 2020).

With regard to shifts in consumer behavior, Sheth (2020) analyzing the post pandemic era in consumer behavior identifies the following eight behavioral patterns. (1) “Hoardings” and its relevant tendency of consumers for stockpiling, (2) “Improvisation” of consumers to find solutions toward the COVID-19 constraints, (3) “Pent-Up Demand”, and postponement of discretionary products such as sport, luxury good, tourism, restaurants, automobiles, homes are prototypical lockdown behaviors. Next, (4) “Embracing Digital Technology”, (5) “Store Comes to Home” likely to work, education and purchasing, (6) “Blurring Work-Life Boundaries” emerged. Upon the restricted daily routine in the time of COVID-19, (7) “Reunions with Friends & Family” for staying social beings despite the confinement, and, (8) Discovery of Talent given the plenty time of “stay at home” mode rise as new patterns of the digital life shift. Similarly, Donthu and Gustafsson (2020) accentuated the positive facets of human behavior caused by social distancing, such as reconnecting with mental – inner self and a healthier lifestyle. Additionally, they underscored the surge of Internet and social media and he questioned how the post pandemic human behavior will be like.

Upon this black swan event, more recent attention has explored the COVID-19 impact on business operations (Agostino, Arnaboldi and Lema, 2020; Donthu and Gustafsson, 2020; Wang *et al.*, 2020; World Tourism Organization (UNWTO), 2020; Frutos *et al.*, 2020; Gretzel *et al.*, 2020a; He and Harris, 2020; Krishnamurthy, 2020; Lazzerini and Putoto, 2020; Maditinos *et al.*, 2020; Sheth, 2020; Sigala, 2020; Course and Systems, 2020; Bartik *et al.*, 2020), or forecasting scenarios on tourism demand (Fotiadis, Polyzos and Huan, 2021). Accordingly, Frutos *et al.* (2020) approaching pandemic from medical and environmental perspective insists that “the threat is global, but the answer is local” (2020:3). Wang *et al.* (2020) accentuates that business managers must determine how to adjust their marketing strategies to disruptive environments and boost resilience in future disruptive events. Moreover,

He and Harris (2020) COVID-19 heightened the need for firms to rethink about their commitment towards Corporate Social Responsibility (CSR) at both strategic and tactical level to tackle ingrained and social issues, such as poverty, inequality and depression.

According to Mckinsey (2021), from redesign of the operational nature of certain business to the need of new set of workforce skills (social, emotional, advanced cognitive, and digital skills) the pandemic as fierce teacher has also caused dramatic fluctuation in the business landscape. These fluctuations derive merely due to new emerging behavioral trends further to anthropause, as consumers confided to their homes and economies are shut down. Pandemic massively affected not only certain discretionary services, such as expos, tourism services, cultural gatherings but also more general, daily industries like taxis, hairdressers, electronics industries (Donthu and Gustafsson, 2020). Indeed, in the case of sports events, Maditinos *et al.*, (2020) highlighted that race destination and race conditions as issues that are serious for the runners and effected by COVID-19. In terms of COVID-19 and Italian accommodation, Del Chiappa, Bregoli and Fotiadis,(2021) extoled the lack of prompt business reflexes in terms of strategic and innovation management.

Similarly, over the last months and upon the black swan event of COVID-19 till today, few days before the museums reopening in Greece, museums have been questioning their “raison d'etre” (Kahn, 2020), as museums were shield. Consequently, despite its infancy, a growing body of literature has explored the link between pandemic and museums. Bonin-Rodriguez and Vakharia (2020) predicted that in their struggle to survive museums would harness various new digital toolboxes and synergies among stakeholders (from artists, organizations, to funders, cities, service organizations, and states). Particularly, as for Italian museums, Agostino, Arnaboldi and Lema (2020) highlighted the fact that museums had and have an intense desire to remain active online despite their physical sites being closed.

Bonin-Rodriguez and Vakharia (2020) acknowledge the pandemic as a chance for museums. At this end of the COVID-19 storm, museum practitioners should have accumulated “COVID-19 lessons learnt” regarding resilience, and digital life of cultural heritage. Hence, an integrative Literature Review (LR) provides a deeper insight into the above questions (Lau and Kuziemsky, 2016; Snyder, 2019). This study based on Literature Review Analysis and Multiple Case Study of Thessaloniki International Film Festival and MOMus Thessaloniki Museum of Photography sought to address this gap.

RESEARCH METHODOLOGY

To explore the interplay among museums/festivals, COVID-19 and social media / digital tools, a systematic literature review was deployed between September 2020 – April 2021. LR as a research method appears as the best methodological tool to provide a starting point of a new emerging topic (Lau and Kuziemsky, 2016 ; Snyder 2019).

The search strands that were used are “social media, digital tools, museums and COVID-19 ”, “ social media, digital tools, museum brand awareness and COVID-19”, “social media digital tools, museum brand engagement and COVID-19” , social media, digital tools, festivals and COVID-19 ”, “ social media, digital tools, festival brand awareness and COVID-19”, “social media digital tools, festival brand engagement and COVID-19”, “digital transformation in museums and COVID-19”, “digital transformation in festivals and COVID-19”. These publications were identified and gathered from renowned online databases and search engines such as Science Direct, EBSCOHOST and Google Scholar. Findings of this review were further assessed. Hence, drawing on a review of 76papers three research questions emerged. These questions were used as the basic research tool for this qualitative research for the case study.

Moreover, a case-study approach was used to allow a deeper insight into this exploratory study. “Case research is specifically welcome in new situations where little is known about the phenomenon and in situations where current theories seem inadequate (Hudson and Hudson, 2013:221). Upon the infancy of the stream in COVID-19, social and digitalization tools, this work followed the protocol of prior studies applied in museums.(Raimo *et al.*, 2021). Thessaloniki International Film Festival was chosen upon its world class heritage

reputation as one of the oldest and leading festival in southeast Europe and Greece. Likewise, MOMus Thessaloniki Museum of Photography was chosen following its repetitive contribution on international photography.

FINDINGS AND ANALYSIS

Quo vadis both museums and festivals in the time of Corona?

With respect to the first research question, the majority or recent studies confirmed the effectiveness of social media and digital tools as a first aid kid fighting the COVID-19 anthropause (Agostino, Arnaboldi and Lampis, 2020; Network of European Museum Organizations, 2020b, 2020a; Ou, 2020; Practice, 2020; Sigala, 2020; World Tourism Organization (UNWTO), 2020; Bonin-Rodriguez and Vakharia, 2020; Burke, Jørgensen and Jørgensen, 2020; Calvert *et al.*, 2020; Course and Systems, 2020; Gretzel *et al.*, 2020; Kahn, 2020; Kist, 2020; NEMO, 2020; Association, 2021; Raimo *et al.*, 2021). More particularly, over the last months and upon the black swan event of COVID-19 museum question their “raison d’être” (Kahn, 2020) as museums were shield. Cultural tourism products, such as museums / festivals underwent a drastic loss of income. However, closed physically cultural organizations remained open via social media and digital services. This online shift undoubtedly has rebutted the deliverable experience from brick and mortar to online context leaving a positive digital footprint and lasting positive effect (Sigala, 2020; Raimo *et al.*, 2021). Digital cultural heritage offered enjoyment, creativity, a virtual window to escape, to experience and to share its content online.

All these studies shown that museums have proved their resilience across the world and have also expanded resilience to society by building bridges and staying alive... via art within the fertile and prominent digital context. From Australia, China, USA and Canada to Italy and Greece , across any time zone museums expanding the borders or time and place, enabled the foundations of the “museum out of the museum era” (Burke, Jørgensen and Jørgensen, 2020; Calvert *et al.*, 2020; Course and Systems, 2020; Gretzel *et al.*, 2020; NEMO, 2020a,2020b; Ou, 2020; Association, 2021). Hence, museums came to visitors and Web 2.0 tools launched a brand- new museum visiting experience. This new experience doesn’t have any time or place borders. On the contrary, the museum visit experience in the new ICT / smart era is not built merely on the understanding of museum artefacts, but it is all about the visiting experience “of the museum out of the museum” mindset.

Digital transformation tools as brand awareness and brand engagement tool for museums and festivals during lockdown

European Union defines digital transformation as the “integration of digital technologies by European enterprises and the impact on society of new technologies, such as the Internet of Things (IoT), cloud computing, innovative digital platforms and blockchain technologies” (European Parliamentary Research Service, 2019: 2). As for the second question, a strong relationship between COVID-19 and digital transformation in museums has been reported in the literature, according to Sigala (2020) and Raimo *et al.*(2021). Indeed, Raimo *et al.* (2021) based on multiple case studies in Italian museum context found that the COVID-19 pandemic has accelerated the adoption of digital technologies.

Moreover, Raimo *et al.* (2021) distinguishes the following three major areas in which the application of new technologies has brought a beneficial contributions: promotion of culture, enjoyment on-site, and managerial and organizational activities. As review has shown, the milestone of this transformation both in in cultural tourism lies in the advent of social media (Belenioti and Vassiliadis, 2016; Belenioti, 2017, 2020; Vassiliadis and Belenioti, 2017) thanks to its a continuous, dialogic, well targeted and cost-effective communication (Belenioti, 2020; Belenioti and Vassiliadis, 2017; Amanatidis *et al.*, 2019; Belenioti, et .al., 2019a,2019b).

Particularly, social media has a positive contribution not only in terms of enhancement of museums’ learning process (Vassiliadis and Belenioti, 2017) but also on brand equity, visitor satisfaction, visitor engagement, museum experience, and the intention to revisit (Belenioti, et al. 2019a; 2019a; Belenioti, 2020). Likewise, when it comes to festivals social media have been

repeatedly emerged as an efficient awareness and engagement tool (Hudson and Hudson, 2013; Hudson *et al.*, 2015; Hoksbergen and Insch, 2016; Belenioti, Gkarane and Vassiliadis, 2017; Celuch, 2021) of digital transformation.

Indeed, several reports shown that museums globally harnessed new digital transformation tools to stay connected with their museum audience and friends. (Burke, Jørgensen and Jørgensen, 2020; Calvert *et al.*, 2020; Course and Systems, 2020; Gretzel *et al.*, 2020; NEMO, 2020a;2020b; Ou, 2020; Association, 2021). COVID-19 resilience toolbox in museums included social media, 5G, Livestreaming, tailor made events based on visitors' demographics and digital analytics, virtual exhibitions, curatorial talks, viewing rooms. Moreover, tours of current collections, art fairs, and touring exhibits and education / remote learning, such as drawing and photography classes/ masterclasses, AR, VR (Kahn, 2020; Practice, 2020) which both Thessaloniki International Film Festival has been incorporating since 2018, and Australian Museums, and, lastly, the prominent big data (Kahn, 2020; Practice, 2020) were the backbone of "museum out the museum" and "co- creation museum digital era". In Italy, museums doubled their social media usage and online activity, and customized their content to remain open during the anthropause (Agostino, Arnaboldi and Lampis,2020). Finally, in the case of China and Australian museums, digital transformation tools served not only as a both brand awareness, brand engagement and survival tool but also as a testbed of CSR endeavor, as museums acted as connector with the healthcare industry.

Classification of emerging research streams on the interplay among museums/festivals, COVID-19, social media and digital tools

Drawing on a review of 76 papers, of which 20 papers are focused on how museums did react fighting COVID-19, this review has classified the available recent bibliography in three major strands. The first strand depicts the opportunities of social media as first aid kit fighting COVID-19 and digital tools as the "modus operandi" of cultural heritage during and after the pandemic (Agostino, Arnaboldi and Lampis, 2020; Network of European Museum Organisations, 2020a, 2020b; Ou, 2020; Practice, 2020; Sigala, 2020; World Tourism Organization (UNWTO), 2020; Bonin-Rodriguez and Vakharia, 2020; Burke, Jørgensen and Jørgensen, 2020; Calvert *et al.*, 2020; Course and Systems, 2020; Gretzel *et al.*, 2020; Kahn, 2020; Kist, 2020; NEMO, 2020a;2020b Association, 2021; Raimo *et al.*, 2021). All these studies confirm that digital tools served as a resilience tool in order that museums keep the society alive by moving online the discourse and the museum experience. A considerable amount of studies presents (Burke, Jørgensen and Jørgensen, 2020; Calvert *et al.*, 2020; Course and Systems, 2020; NEMO, 2020a;2020b; Ou, 2020; Association, 2021) that the new digital museum experience in the time of COVID-19 is harnessed with a wide range of the digital transformation tools umbrella and digital marketing toolbox.

The second stream analyses patterns and best practices of museum and festival's reaction during the lockdown and pandemic across the world (Burke, Jørgensen and Jørgensen, 2020; Calvert *et al.*, 2020; Course and Systems, 2020; Gretzel *et al.*, 2020; NEMO, 2020a;2020b; Ou, 2020; Association, 2021). This stream as a snapshot of digital museum practices during the lockdown confirms that COVID-19 served as an accelerator of cocreation & museums digital transformation. Immersive virtual tours and virtual exhibitions, gamification, AR, VR, storytelling, social media (Instagram, Facebook, Tik Tok), digital tools (Viber, Zoom), online ticketing, 3D animation, big data, 5G, livestreaming and chatbots harnessed the digital transformation at three levels of areas: promotion of culture, the enjoyment on-site, and managerial and organizational activities. All these tools transformed the museum experience, and reconnected with its audience at a more interactive, dynamic, continuous via the digital tools.

In Greece, renowned cultural organizations, such as MOMus Thessaloniki Museum of Photography and the Thessaloniki International Film Festival moved fully online. Digital cultural heritage again offered enjoyment, creativity, a virtual window to escape, to experience and to share its content online via livestreaming and social media. Thus, not only did Greek museums become resilient, but they also expanded their brand awareness, enhanced their brand engagement. Additionally, cultural industries also bolstered their identity as source of science

communications and knowledge repositories (Kahn, 2020) via edutainment, aligned with previous studies (Vassiliadis and Belenioti, 2017; Belenioti, 2020).

Particularly, Thessaloniki International Film Festival (TIFF) consistent to its moto “Cinema No matter What, Festival in Every Way” and to its tech-savvy mindset, moved online delivering a memorable cultural experience at both TIFF61, and Thessaloniki Documentary Festival (TDF22 and TDF23) productions. Not only did TIFF create content across the world by sharing and by co-creating the magic of art, cinema, and photography, but it also harnessed the state-of-the-art technology by creating AR, VR events, responsive website, by providing screenings and apps accessible to the digitally diverse audience (older or disabled people). The following table presents the resilience toolbox of TIFF amid COVID-19.

Table 1: Digital Transformation – COVID19 Resilience Toolbox enabled at TIFF61, TDF22, TDF23

Digital Transformation – COVID19 Resilience Toolbox enabled at TIFF61, TDF22, TDF23 productions
AR
VR events
Responsive website
Online screenings
Content accessible to the digitally diverse audience (older or disabled people)
Livestreaming
Online ticketing
Chatbots
Social media
Virtual exhibitions / online talks & masterclass & online AGORA meetings
Gamification in the case of TDF23
Storytelling in social media
Apps

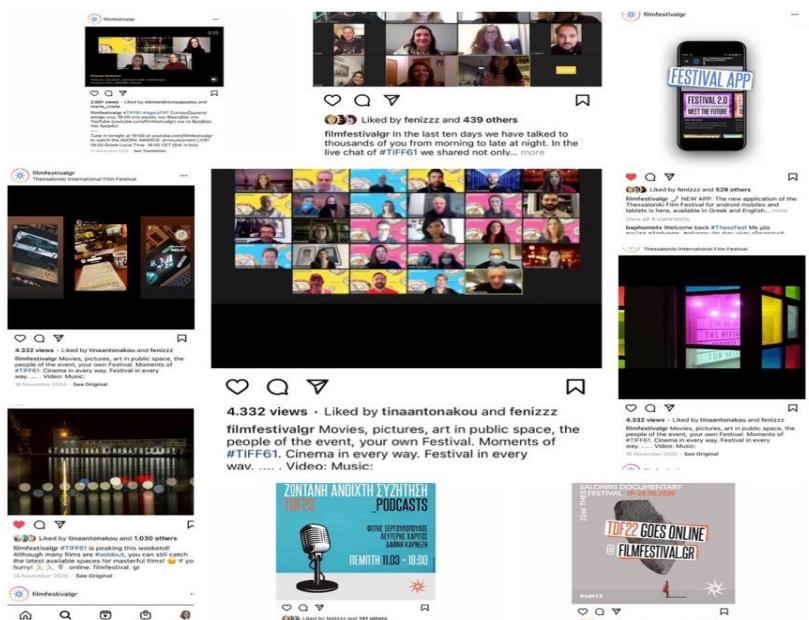


Image 1: Snapshot of Digital Transformation / COVID19 Resilience Toolbox enabled at TIFF61, TDF22, TDF23



Image 2: TIFF Alternative Press Conference held on YouTube

In the same vein, MOMus Thessaloniki Museum of Photography boosting society's Resilience & enabling the notion of co – creation, launched its exhibitions in its online program "MOMus Thessaloniki Museum of Photography Resilience Project". The milestone of this online program was the exhibition "Anthropause". "Anthropause" is an inclusive exhibition created by artists, photojournalists, amateurs, citizens, museum visitors from various parts of Greece sought to articulate artistically and spiritually the invisible aspects within the condition of confinement. The medley of images was also uploaded to the digital platform (<http://res.MOMus Thessaloniki Museum of Photography.gr>) acting as an open access archive for this unique condition of coronavirus denoting that even we are so far and so close, at the same together we stand.

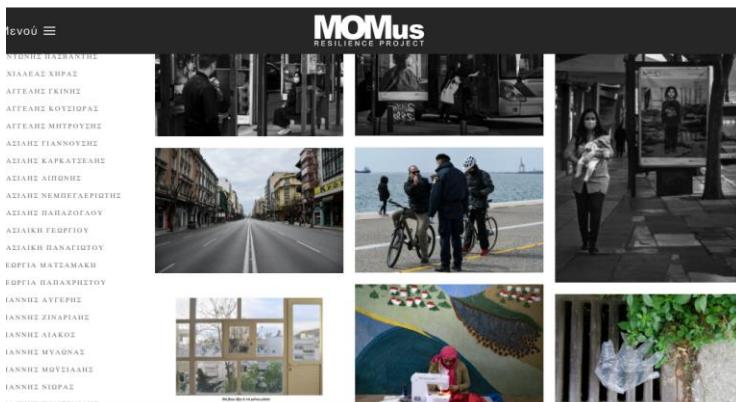


Image 3: MOMus Thessaloniki Museum of Photography Resilience Project"- Exhibition "Anthropause"

Likewise, in Italy Agostino examining 100 museums (Agostino, Arnaboldi and Lampis, 2020) notes that although museums physically were closed, were virtually more active than ever. Doubling their social media presence, Italian museums have increased their awareness, followers, and brand engagement. Museums had social media as vehicle to act as source of communication science and repository knowledge. Via SM museums spread knowledge and fun – facts about artifacts, organized interviews with experts, run virtual treasure hunts and various virtual games or even applied influencer marketing plan, with Ministry for Cultural Heritage serving as their influence.

Similarly, in Australia virtual exhibitions /curatorial talks and tours, educational classes such as photography masterclass via remote learning, and custom- made interactive events was also the regime of Australian Museums boosting their engagement and staying alive during the anthropause (Practice, 2020). Hence, while God did close the museum door, 5G opened museum windows. Thus, not only did China Museum and Canadian museums go online but they also boost their CSR action by coordinating donation of much-needed face masks, gloves, sanitizers and other medical equipment (Calvert *et al.*, 2020; Ou, 2020).

Moreover, the third stream involves both the problems and the challenges on accessibility, licenses and financial resources attendant to new museum role as knowledge repositories, communicators and community connectors (Agostino, Arnaboldi and Lampis, 2020; Agostino, Arnaboldi and Lema, 2020; NEMO, 2020; Network of European Museum Organisations, 2020a, 2020b; Course and Systems, 2020; Bonin-Rodriguez and Vakharia, 2020; Course and Systems, 2020; Kahn, 2020; Kist, 2020; NEMO, 2020; Network of European Museum Organizations, 2020a, 2020b; Ou, 2020). This stream alerts both tourism, museum practitioners and scholars on the challenges of digital transformation such as the future of licenses, the lack of funding, the lack of digital skills and digital accessibility, the infancy of studies in cultural heritage and the need on EU funding in digital heritage as key barrier of the digital transformation during and after the pandemic (NEMO, 2020; Network of European Museum Organisations, 2020b, 2020a) and the integration of social media as curation and marketing tool at strategic level (Course and Systems, 2020).

Finally, several researchers highlighted that museum should harness digital transformation tools such as social media, AV, VR and most importantly big data at a tactical level (Agostino, Arnaboldi and Lampis, 2020; Kahn, 2020; Kist, 2020) conforming to museums mission, in accordance with prior studies on social media (Vassiliadis and Belenioti, 2017; Mangold and Faulds, 2009; Waters *et al.*, 2009; Russo, Watkins and Groundwater-Smith, 2009; Srinivasan *et al.*, 2009; Waters, 2010; Lehman and Roach, 2011; Waters and Jamal, 2011; Waters and Jones, 2011; Berthon *et al.*, 2012; Fletcher and Lee, 2012; Hausmann, 2012a, 2012b; Nair, 2011; Nah and Saxton, 2012). The following table presents this typology.

Table 2: Summary Table of studies on COVID-19, Social Media – Digital Transformation Tools within Museums

Research Strands in social media& FPOs' branding	Number of studies	Authors
1. Social media & Digital tools as first aid kit amidst COVID-19	19	Agostino, Arnaboldi and Lampis, 2020; Network of European Museum Organisations, 2020b, 2020a; Ou, 2020; Practice, 2020; Sigala, 2020; World Tourism Organization (UNWTO), 2020; Bonin-Rodriguez and Vakharia, 2020; Burke, Jørgensen and Jørgensen, 2020; Calvert <i>et al.</i> , 2020; Course and Systems, 2020; Gretzel <i>et al.</i> , 2020; Kahn, 2020; Kist, 2020; NEMO, 2020a; 2020b Association, 2021; Raimo <i>et al.</i> , 2021
2. Digital transformation tools as key engagement tool; patterns and best practices	13	Agostino, Arnaboldi and Lema, 2020; Practice, 2020; Sigala, 2020; Burke, Jørgensen and Jørgensen, 2020; Calvert <i>et al.</i> , 2020; Course and Systems, 2020; Gretzel <i>et al.</i> , 2020; Kahn, 2020; Kist, 2020; NEMO, 2020a; 2020b Ou, 2020; Association, 2021; Raimo <i>et al.</i> , 2021
3. Challenges & impediments towards the new digital facet of museum in the pandemic & post pandemic era	9	Agostino, Arnaboldi and Lampis, 2020; Agostino, Arnaboldi and Lema, 2020; NEMO, 2020; Network of European Museum Organisations, 2020a, 2020b; Course and Systems, 2020; Bonin-Rodriguez and Vakharia, 2020; Course and Systems, 2020; Kahn, 2020; Kist, 2020; NEMO, 2020; Network of European Museum Organisations, 2020a, 2020b; Ou, 2020

DISCUSSION

This study set out to provide an integrative literature review regarding the resilience in digital cultural heritages sectors, such as festivals and museums towards the anthropause followed by the COVID-19 pandemic lockdown. In line to Gretzel *et al.* (2020), this study views COVID-19 as disruptive event an augurating a brand-new digital museum era that requires the theoretical and empirical attention of researchers.

Drawing on a review of 76 papers, the review has identified three major strands. The first strand presents the opportunities of social media as first aid kit fighting COVID-19 and how digital tools become the “modus operandi” of cultural heritage during and after the pandemic. The second strand analyses patterns and best practices of museum and festival’s reaction during the lockdown and pandemic across the world including Greek cases such as the Greek Case of Thessaloniki International Film Festival and MOMus Thessaloniki Museum of Photography. The third stream involves both the problems and the challenges on accessibility and financial resources attendant to new museum role as knowledge repositories, communicators and community connectors.

The study showed that social media and digital tools served as a resilience tool in order that museums keep the society alive by moving online the museum/ festival experience. Moreover, the study confirmed social media multidimensional benefits and its brand-cocreation role, aligned to prior studies on the social media contribution to the new enhanced flow of museum experience, co- creation and the museum out the museum model (Vassiliadis and Belenioti, 2017; Belenioti, 2020; Hausmann, 2012a, 2012b; Fletcher and Lee, 2012). In line to Buchalis (2020), Stylos, Zwiegelaar and Buhalis (2021), and Belenioti (2020), not only did digital transformation via Web 2.0, social media, Big Data reshape the relationship between museums and visitors enabling co- creation& H2H communication, but it also boosted engagement, awareness and expand resilience amid COVID-19.

Finally, another interesting finding Sheth (2020) theory regarding the emergence on COVID-19 behavioral patterns such as “Embracing Digital Technology”, “Store Comes to Home”, “Discovery of Talent” are also applied in museum context. Thus, within lockdown like as education, store and work come home, so do museums. The study has shown that no matter where visitors are, they visit any museum of the Earth via one click, in their “stay at home” life. The only way to visit museums and escape from their quarantine routine was by “Embracing Digital Technology” in the museum context, as well. Indeed, museums flourishing the “discover of talent” via online events that “bolster health and wellbeing, community identity, reducing isolation, and social cohesion” (Practice, 2020 :3).

CONCLUSIONS

This study contributes by serving a classification of the recent literature and by acting as a roadmap regarding the new facet of cultural tourism products in the post – pandemic era. Addressing the research gap upon the infancy of the field and the public health emergency of COVID-19, the contribution of the study is twofold. Firstly, the paper serves as solid starting point providing an overview of the state of the art in a merely interdisciplinary area. Secondly, the paper extends the knowledge by proposing a related future agenda and emerges where more research is needed to facilitate future theoretical frameworks and conceptual models.

Turning to the question “Quo Vadis Museum?”, the study indicated that in the post-COVID-19 museum era digital experience is deemed to be the backbone of “modus operandi”, aligned to the bibliography on harnessing digital transformation tools such as social media, Smart Tourism Tools, AI, VR and Big Data in tourism, museums, festival and NPOs. However, despite social media benefits, online museum experience cannot replace the magic of onsite museum and festival experience. Ultimately, in the new post-pandemic museum era the digital experience is deemed to be the backbone of “modus operandi” until vaccination completion.

Hence, till the complete vaccination, two major issues need to be elucidated. First, the holistic integration of social media including and the problems and the barriers attendant to

social media integration as a viable strategic tool for curation and marketing orientation could be usefully explored in further research. Second, another equally important challenge is improving digital literacy skills and harnessing on a larger scale Smart Tourism Application (AR, VR, Mobile Media apps) to boost accessibility by elder and disabled audience and to provide more personalized experience. Future research agenda include directions such as (a) mapping the new digital museum experience, (b) harnessing AR, VR, big data in a holistic, integrated framework to reach higher engagement and personalization, and (c) call for starting the dialogue on the new “museum era out of museum” era.

A key policy and research priority should be therefore the astonishing symbiosis of processes, personnel and physical amenities with digital transformation toolbox on boosting satisfaction, relax, wellbeing, implicit learning during the visit and on emerging museums as ideal escapade, in line with Del Chiappa *et al.*, (2013). Thus, based on prior evidence on the contribution of deploying Repertory Grid Analysis into segmentation (Vassiliadis and Fotiadis, 2008), of blueprinting process in Tourism experience (Vassiliadis and Fotiadis, 2016), and of exploring moderator features triggering visitor satisfaction and revisit intention (Fotiadis, 2018; Vassiliadis, Mombeuil and Fotiadis, 2021), future studies should further delve into behaviour patterns of visitors. Last, given the latest work by Fotiadis, Stylos and Vassiliadis, (2020), a further study could assess destination and event choices as moderator factors of tourism involvement in the post- pandemic era in cultural tourism context.

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