ATELIER FOR FESTIVAL MANAGERS

TOOLKIT

DIGITAL TECHNOLOGY AND
FESTIVAL-MAKING

Compiled by Adel Abdelwahab and Lily Hughes

THE FESTIVAL ACADEMY

About our Toolkits Series

Since September 2019, The Festival Academy and its community have been developing the series of toolkits of which this volume is part within the framework of the Act for Global Change: A Global Conversation from the Arts to the World (ACT) project supported by Creative Europe (**Cooperation Projects 2019-21**).

The aim of this series is to **provide festival experts and sector practitioners with information on current trends and inspiring examples** from the industry, as well as relevant contextual information on their specific issues. With this, the toolkits are developed with the intention of enabling readers to get insights and inspiration for current and future challenges in their own practice. They include **knowledge gathered in the series of activities (Ateliers, keynotes and working sessions) promoted by The Festival Academy** since September 2019, as well as information from a variety of existing research resources and sources produced and brought by our community of Alumni, mentors, experts, speakers and festival practitioners.

The series covers **six topics**, within the scope of their relevance to festival and cultural practitioners:

1. Digital Technology
2. Programming and Curating a Festival
3. Caring for Artists and Technical Crew
4. Sustainable Business Practices
5. Audience Development and Retention
6. Festivals, Climate Change and Environmental Sustainability

The content of each topic-based toolkit includes theoretical knowledge and relevant case studies that can be used as reference and as a basis for the practice of festival making. For such, each toolkit is divided into **two parts**: the first one compiling the **pertinent theoretical background** on its specific topic and the respective links and sources for additional information; and the second part gathering **best practices and examples** related to the specific Toolkit theme which can serve as inspirational guides for festival-makers worldwide.

These Toolkits are not meant to provide 'one-size-fits-all' templates as conditions in which festivals take place vary substantially across the globe depending on political and social contexts, access to resources, and a range of other factors.   We have attempted to glean case studies from as many different contexts as possible. It is up to readers and festival managers to interpret and apply the principles contained in the Toolkits to their respective conditions.

Readers are welcome to **navigate these toolkits by clicking through their interactive summaries** and being redirected thus to the parts that most interest them.

These toolkits were developed by teams of alumni with The Festival Academy staff and Atelier facilitator also contributing. The alumni team comprised:

Adel Abdelwahab (artistic director of Hewar Theater Group, theater and performing arts curator – Egypt)

Ángela Delgado Valdivia (director of Hay Festival Arequipa – Peru)

Koe Gaik Cheng (art administrator, manager of Little Door Festival, Malaysia)

Glyn Roberts (festival director and CEO of Castlemaine State Festival – Australia)

Lily Hughes (UK/Australia season programme manager at Australian Department of Foreign Affairs and Trade, Scotland)

Mauricio Lomelin (former producer at the Lincoln Centre New York, associate producer at Por Piedad Teatro – USA/Mexico)

Samantha Nampuntha (event producer, public relations and communications expert – Malawi)

Please refer to each toolkit for the names of its specific authors.

Anaïz Dessartre Mendonça, Inge Ceustermans and Mike van Graan of The Festival Academy contributed too.

The toolkits are **open-sourced, continuously developed tools**. Therefore, festival and cultural practitioners from all backgrounds and levels of experience are **invited to expand these materials** by adding their own contributions, building on the gathering of knowledge and insights shared with the whole festival-making community worldwide.

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1. Introduction

1.1. About this toolkit

The toolkit is based on information gathered from a series of Ateliers and activities promoted by The Festival Academy, existing resources and knowledge produced by our alumni, mentors, experts & festival practitioners' network. This toolkit is a work in progress, which is why it is intended that it will be developed and updated over time to build on experience and insights generated through future activities.

The aim of this toolkit is to provide festival experts and sector practitioners access to information on current trends of digital technologies, as well as relevant contextual information on the topic. This toolkit should enable readers to get insights and inspiration for addressing challenges of contemporary digital tools for festivals.

The toolkit provides the reader with a set of issues and relevant examples that can guide future Festivals. The first part compiles relevant information about digital technology and their respective links and sources for additional information. The second part gathers best practices and examples related to the topic of this toolkit which can serve as inspirational guides for festival-makers worldwide.

1.2. Why this toolkit

The Digital technology and the revolution of social media is very essential and vital to our daily bread and living today, it's a system which intersects and forms our behaviors, notion of pleasure and our feeling of accomplishment as individuals.

Arts festivals represents our desire of human communication, learning, curiosity and celebration. So, with massive daily effect of digital technology and its applications and systems the global art and cultural community reached a new era since 2011 with a highly speed momentum of changing of values and neuter of the art and culture because of this and because what we are experiencing recently of Covid –19 pandemic. It's become fact in our new normal to question and research the digital technology to be able to develop our own strategy as festivals mangers.

1.3. History, key concepts, and purpose

"American engineers began developing digital technology in the mid-twentieth century. Their techniques were based on mathematical concepts suggested by the seventeenth century German mathematician, Gottfried Wilhelm Leibniz, who proposed a binary computing system. His innovation inspired such numerical codes as American Standard Code for Information Interchange (ASCII) that described objects with digits.

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Digital technology is a base two process. Digitized information is recorded in binary code of combinations of the digits 0 and 1, also called bits, which represent words and images. Digital technology enables immense amounts of information to be compressed on small storage devices that can be easily preserved and transported. Digitization also quickens data transmission speeds. Digital technology has transformed how people communicate, learn, and work.

Telecommunications has relied on digital methods to transmit messages. In the early 1980s, enhanced fiber optics enabled the development of digital communication networks. Digital technology replaced analog signals for many telecommunication forms, particularly cellular telephone and cable systems. Analog-to-digital converters utilized pulse code modulation (PCM) to change analog data into digital signals.

The Federal Communications Commission ordered all American broadcasts to be digital by 2010. Digital printing with electrophotographic and formatted data technologies have altered how books and magazines are published. The Library of Congress National Digital Library Project has worked to preserve and expand access to rare items. Copyright issues concerning digital technology have addressed the copying of music and videos without performers receiving royalties. The Electronic Numerical Integrator, and Calculator (ENIAC) was often credited as the first electronic digital computer. A 1973 court ruling on patent infringement declared John V. Atanasoff and Clifford E. Berry were the digital computer's inventors and that the ENIAC had been derived from their design.

In the early 2000s, digital computers ranging from laptops to Internet networks came in many sizes and performed various tasks. Supercomputers performed complex mathematical calculations analyzing vast amounts of data. The Digital Data Broadcast System (DDBS) guided air-traffic control. Digital radiography converted analog signals of x-rays to create digital images. Digital information was stored on plastic disks with pitted patterns of 1s and 0s that lasers translated. By the early 2000s, digital cameras had transformed photography by recording color and light intensities with pixels. Also, digital compression of images and video was achieved by Joint Photographic Experts Group (JPEG) and the Moving Picture Experts Group (MPEG) codes. Animation had often been digitized with some films and cartoons being created entirely with computers." (Digital Technology, 2021)[1]

1.4. How to provide feedback, amendments and additions

We are always looking for ways to improve and always open to new ideas. Please email: info@festivalacademy.eu for feedback, amendments, and additions. Technology and its place in festivals is evolving all the time, and we welcome new ideas and insights.

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[1] "Dictionary of American History. Encyclopedia.com. 25 Oct. 2021." Encyclopedia.com. Encyclopedia.com, November 3, 2021. https://www.encyclopedia.com/history/dictionaries-thesauruses-pictures-and-press releases/digital-technology.

2. "Digital technology": History and tools

2.1. History of the development of digital technology

"Throughout the 1990s the terms *new media* and *digital culture* were commonly used phrases to describe several technological, social, and political developments during the period. A major consumer change during this decade was the growth in technologies available to individual consumers, the personal computer being the most influential and common of them all. The popularity of the personal computer as a consumer item in households was partly a result of the growth of the Internet beginning in the early 1990s.

While the Internet was praised as a technological revolution at the end of the millennium, its origins can be dated back to the Cold War era. As tensions escalated between the United States and the former USSR after World War II, the U.S. Department of Defense put a great deal of effort into creating a communications network that would outlive a possible nuclear war. In the 1960s this research became known as the Advanced Research Projects Agency. Over the next several years the developing network of linked computers became useful for educational institutions but maintained its strong connection to military explorations. Yet the growing technology did not serve the commercial function that would define it by the 1990s. Continued technological developments and the growth of the computer workstation in the 1980s provided an environment for the Internet to become more sophisticated and influential. Many date the Internet revolution, as it became known to the general public, to 1994.

Part of the impact of the Internet is its reliance on innovations in digital technology. Digital technology is different from previous analog technology in how information is processed, stored, and displayed. Digital technology processes information as binary code, that is, zeros and ones. The information can be recalled at any point and reproduced in identical replicas. With analog technology, information is carried through varying frequency to carrier waves. Reproductions through analog technology degrade with each generation of copying. This is why a second-generation videotape is of lower quality than a first-generation tape. Thus, the digital technology's breakthrough is in recording, reproducing, and disseminating identical information to limitless numbers of people.

By the late 1990s the promises of the Internet and digital technology had reached a global scale. In fact, the world was often referred to as a global village where human communication between people in the remotest parts of the planet could happen with ease. Advertisements from technology companies, such as IBM, Sun Microsystems, Compaq, and Microsoft, showed a multiracial, harmonious world brought together by advances in technology. This period is known as the digital boom. A large number of what were known as start-up high technologies developed in a short period of time. Many employees involved in these companies became extremely rich during the late 1990s, but a large percentage lost their wealth when the digital economy collapsed at the turn of the millennium. For the most part blacks and Latinos did not benefit financially from

this economic trend, as their numbers were extremely low on the payroll of high-technology companies." (New Media and Digital Culture, 2021)[2]

Additional information on subject, as well as a timeline of digitization, can be retrieved from https://www.forbes.com/sites/gilpress[3].

2.1.1. An introduction

"Cyberspace encompasses technological, social, cultural, economic, and legal facets. The existing regulatory framework is composed of different national laws, manifold self-regulatory guidelines and a number of multilateral treaties that have relevance in varying degrees. In this fluid and distributed arena, the evolution of applicable overall principles can play a valuable role.

Discussions on this subject are variously described under the broad label of 'Internet Governance', applied as an inclusive reference for the ongoing set of disputes and deliberations over how the Internet is used, coordinated, managed and shaped[4].

From the World Summit on the Information Society, the following definition emerged: '...Internet governance is the development and application by governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet'[5].

A large number of Internet Governance declarations, guidelines, and frameworks have been produced and reviewing these documents is the core purpose of this study. The review takes place against the backdrop of UNESCO as an important player in discussions about principles relevant to Internet Governance. Although UNESCO does not have a specific mandate covering the full field of Internet Governance as such, areas of its work have significant bearing on aspects of the subject, and vice versa. One element highlighting the intersection has been the exploration at UNESCO, starting in September 2013, of the 'Internet Universality' framework.

This concept summarizes the significance of relevant principles that have been agreed in various decisions by the UNESCO Member States. In particular, 'Internet Universality' is constituted by four key principles: Rights, Openness, Accessibility, and Multistakeholder Participation

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[2] "New Media and Digital Culture." Encyclopedia of African-American Culture and History. *Encyclopedia.com.* (September 22, 2021). https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/new-media-and-digital-culture.
[3] Gil Press, "A Very Short History of Digitization," Forbes (Forbes Magazine, January 11, 2016), https://www.forbes.com/sites/gilpress/2015/12/27/a-very-short-history-of-digitization/?sh=41c7d05749ac.

[4] "The Digital Deciders," New America, accessed November 12, 2021, https://www.newamerica.org/cybersecurity-initiative/reports/digital-deciders/internet-governance-and-todays-context/.
[5] Weber, Rolf H. "Principles for governing the Internet: a comparative analysis." (2015).

(summarized in the acronym R.O.A.M)[6]. How these articulate to the numerous relevant statements by other actors is analysed throughout the pages that follow.

The roots of the research presented in this current publication lie in UNESCO's fulfilment of Resolution 52 of its 37th General Conference in November 2013, as agreed by the Organization's 195 Member States. This resolution called for a comprehensive and consultative multistakeholder study, within the mandate of UNESCO, on Internet-related issues of access to information and knowledge, freedom of expression, privacy, and the ethical dimensions of the Information Society.

The methodology of such a wide-ranging study included consultative meetings with Member States and other actors, where it was motivated that UNESCO's research should be located within an analysis of the wider picture of existing statements about the Internet, so as to avoid duplication or mission-creep. As a result this publication was commissioned as a feeder document for the wider study, and it also stands alone as a review of more than 50 statements that are pertinent to many of the issues within Internet Governance.

This research is referenced within the wider study, providing context which informs the particular niche and value-add for UNESCO's possible future options on Internet-related issues within its mandate[7].

Against this backdrop, some observations can be made about the overall field of Internet Governance within which numerous positions have been expressed. Five major features of global Internet Governance have been identified by scholars, all of which are potentially impacted upon by overarching principles:

1. Arrangements of technical architecture as arrangements of power: Internet protocols and standards are also political in both their design and effects; therefore, Internet Governance decisions involve both scientific reasoning and social considerations of power and authority, including policies about how the technical architectures are used to regulate and control content. This architecture relates to the principle of "Openness" in the "Internet Universality" concept and is particularly relevant to issues such as open standards, open access/architecture, open knowledge resources, and open innovation, as well as relevant to issues around entry barriers (whether state imposed or privately enforced).

2. Internet infrastructure as proxy for content control: Internet policies such as deep packet inspection are being used for content mediation functions for which they were not originally designed. Such applications of political and economic power raise questions of democratic mandate and oversight. Furthermore, the same technologies that improve citizen information diffusion are applied by many actors to filter and censor information as well as creating systems of surveillance. These approaches impact on the exercise of

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[6] "Roam-X Indicators," UNESCO, September 1, 2021, https://en.unesco.org/internet-universality-indicators/roamx-indicators.
[7] Weber 2015.

human rights (such as the freedom of expression and privacy) as well as the net neutrality principle as part of "Openness" which are substantive pillars of UNESCO's "Universality Concept".

3. Public-private issues in Internet Governance: Important Internet Governance mechanisms such as the domain name system are mainly governed and shaped by private sector and technical actors (also called "privatization"). The assumption of functions for the public good by these actors has in the past contributed to the success of new technological networks. At the same time, there are debates about the appropriate role of other actors (eg. states, interstate organisations, civil society, academia, etc). The fourth pillar of UNESCO's "Universality Concept" refers to multistakeholder participation, which entails a wide spread of participatory decision-making while allowing that different formulae may be appropriate for different issues.

4. Internet control points as sites of global conflict over competing values: Control points on the Internet include amongst others Critical Internet Resources (like Internet addresses), protocols and interconnection regimes. Besides how these issues implicate human rights, there is also the question as to users' ability to participate in issues of values and ethics on the Internet. In turn, this depends on Internet access as a social dimension. These elements are foreseen in the third pillar of the "Internet Universality" concept, which highlights universal access, multilingualism, quality of content, user empowerment and ethical considerations.

5. Regional geopolitics versus collective action problems of Internet globalization: Notwithstanding the internationalization of many activities, it cannot be overlooked that global Internet stability is also dependent on local Internet conditions since local oversight and local infrastructure bottlenecks can serve as "obligatory passage points" for international traffic.6 National and regional initiatives addressing geopolitical strategies need to be balanced against global collective actions in regard to the impact on the transnational Internet. These political influences are not directly addressed in the "Universality Concept" but are partly reflected in the issue of "Rights", for example in cultural diversity (which also accords with "Openness" in the sense of diverse interpretations that nevertheless remain consistent with the broad framework of human rights)[8].

For UNESCO's activities that impact on Internet policies, and vice versa, additional research on Internet Governance principles (declarations, normative frameworks and accountability measures) is of relevance; therefore, this comprehensive study attempts to achieve the following objectives[9]:

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[8] Weber, Rolf H. "Principles for governing the Internet: a comparative analysis." (2015).
[9] Weber, Rolf H. "Principles for governing the Internet: a comparative analysis." (2015).

- to provide a comprehensive review of the core principles in key initiatives on Internet Governance principles which have been developed and adopted by various stakeholders, identifying areas of similarities, overlaps, consensus, differences and disagreements, thereby using comparative indicators; these initiatives should be of relevance to the four fields of UNESCO's Internet Study (UNESCO 2015), i.e. (i) access to information and knowledge, (ii) freedom of expression, (iii) privacy and (iv) ethical dimensions of the information society; they should also be of relevance to UNESCO priorities and themes, and to UNESCO's five programme areas;

- to put these texts into the historical, political, economic and social context, and to analyze the extent to which various declarations have been used as normative instruments, with reference to related accountability mechanisms and indicators;

- to analyze the compatibility and completeness of existing documents with respect to UNESCO's mandate and positions, as encompassed by the draft concept of "Internet Universality" (IU) and the R.O.A.M. framework (meaning four principles of IU: Human Rights based, Openness, Accessible for all and Multistakeholder participation), and to identify any gaps;

- to provide elements for a user-friendly online resource web page to Member States, civil society, the private sector, technical community and individuals with open access to the documents and data visualization;

- to clarify elements that are relevant to UNESCO actions, for consideration by Member States, based on a thorough understanding of existing declarations, frameworks and accountability mechanisms.

In pursuit of these objectives and in concretizing the general foundation of the research work, the key questions of the following study can be phrased as follows:

- What has been developed and adopted by stakeholders as regards international and regional declarations, guidelines, frameworks, and accountability mechanisms related to one or more fields of the UNESCO study?

- What were the historical, political, economic, and social contexts that led to the documents' creation and have the documents been used as normative instruments by the stakeholders?

- In particular, what specific options concerning Internet principles might UNESCO Member States consider, including their relevance for the Organization's Global Priorities of Africa and Gender Equality, shaping the post-2015 development agenda, supporting the goals of Small Island Developing States and taking forward the Decade for the Rapprochement of Cultures?

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- Is there a gap that needs to be filled to cover the areas under UNESCO's mandate?

- How does UNESCO's draft concept of "Internet Universality" compare with the existing declarations and frameworks? How could the concept be measured and applied?

In terms of limitations, the following study did not collect all available Internet Governance principles documents but focused on those with an acceptable degree of finalization and with a view to assessing substantive gaps rather than mapping each and every statement. The main focus throughout is to put attention on foundational Internet Governance principles even if more extensive wording or even documents would be available. For example, the study analyzes the 10 principles of the Internet Rights and Principles Dynamic Coalition (IRPC) not the full Charter even if some of its 21 Articles are relevant for this survey. At the same time, the online resource that accompanies this study does provide a more extensive mapping, which is a knowledge resource that can complement the sample of materials analyzed here. Further, it is acknowledged that not all documents that mention a given concept apply exactly the same meaning to it. However, as an indicative process, the review in this study is still able to generate insight into the patterns of convergences, divergences and gaps. The study analyzes its selection of documents with a methodology of specific indicators designed in relation to the "Internet Universality" concept. The applied research encompasses a quantitative and a qualitative assessment: On the one hand, the existing declarations, guidelines, and frameworks are listed, and the contents are quantitatively linked to the relevant UNESCO objectives; on the other hand, the issues contained in these documents are qualitatively analyzed.

This study is much more than a rough comparison of the sampled documents, but it is also not as deep as being based on a discourse analysis of the underlying semantics of each document. The treatment, however, is intended to be fit for the purpose of identifying trends at a broader level." (Principles for governing the internet, 2015)[10]

2.2. Digital Technology and Education

"Digital technologies are electronic tools, systems, devices and resources that generate, store or process data. Well known examples include social media, online games, multimedia and mobile phones. Digital learning is any type of learning that uses technology." (Teach with digital technologies , 2019)[11]

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[10] Weber, Rolf H. "Principles for governing the Internet: a comparative analysis." (2015).
[11] "Teach with Digital Technologies," Department of Education and Training Victoria, accessed October 18, 2021, https://www.education.vic.gov.au/school/teachers/teachingresources/digital/Pages/teach.aspx.

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"According to César Coll, it is necessary to redefine the concept of innovative school – which to date was based around promoting the learning of technology (of ICTs) with the aim of training children in the use of tools and strategies for the processing and transmission of information – in such a way that the focus is on the use of technologies for learning with technology Coll. Therefore, it is a case of converting ICTs into Learning and Knowledge Technologies (LKTs), which can be understood as a view of ICTs from the school. In other words, putting technologies at the service of an improvement in teaching-learning processes, of evaluation and organization as well as of upgrading within a context of constant change." (Coromina, 2018)[12]

2.3. Digital Technology and Advocacy

2.3.1. The Latin roots of advocacy

"Advocacy originates from *advocare*, 'call to one's aid' or to speak out on behalf of someone, as a legal counsellor. Conceptually, advocacy fits into a range of activities that include organizing, lobbying and campaigning. Organizing is a broad-based activity designed to ensure that the views represented in advocacy come from those who are actually affected by the issue. Lobbying derives from the Latin word loggia, a room where one would meet directly with decision makers to engage in (often private) quality discussions and debate. Compared to organizing, lobbying takes a more targeted approach and reaches out to fewer people. On the other end of the spectrum, the Latin origin for campaigning is campus, the wider battlefield. An advocacy campaign publicly promotes an agenda, involving platforms where a wide audience can hear the advocate's message." (UNICEF, 2016)[13].

"Any organized effort to influence public perception of an issue, the policy-making process, or particular legislators is considered political advocacy. Nowadays, digital apps, social media, and the transition to mobile have together transformed the way that citizens connect with lawmakers, reinventing how constituents participate in the legislative process. Digital advocacy is the result of this innovation''[14].

2.3.2. What is Digital Advocacy?

Digital advocacy describes efforts to mobilize constituents to participate in political advocacy through the use of technology. In this blog post, we are going to focus exclusively on one part of

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[12] Júlia Coromina, "Learning and Teaching with Digital Technologies," CCCB LAB (CCCB Lab, February 7, 2019), https://lab.cccb.org/en/learning-and-teaching-with-digital-technologies/.

[13] United Nations Children's Fund, "ADVOCACY TOOLKIT: A Guide to Influencing Decisions That Improve Children's Lives" (United Nations Children's Fund, 2016), https://www.right-to-education.org/resource/advocacy-toolkit-guide-influencing-decisions-improve-childrens-lives.

[14] Cleo Dan, "What Is Digital Advocacy?" Muster Advocacy Software, April 15, 2016, https://www.muster.com/blog/what-is-digital-advocacy.

the puzzle that constitutes digital advocacy: online tools built specifically to mobilize constituents on behalf of a mission-oriented organization: advocacy software.

What Do Digital Advocacy Tools Do?

Digital advocacy tools enable organizations to influence the policy or regulatory process through collective civic engagement. The term, "digital advocacy", broadly encompasses all online activities conducted by citizens directed towards influencing legislation or rules.

How is Digital Advocacy Affecting the Advocacy Industry?

The rise of digital advocacy is changing the way that public affairs practitioners, lobbyists and association professionals perform their traditional job roles. The increasing adoption of technology tools in the government relations space illustrates how much value these technology tools bring to the advocacy profession, and the political arena in general.

The ease-of-use factor associated with online political engagement programs make it fairly intuitive and cost-effective for interest and advocacy groups to engage in the legislative process. While most digital advocacy tools come at a cost to an organization using their services, the ROI on investing an online tool make the upfront cost worthwhile. This blog post outlines four key benefits digital advocacy solutions offer to advocacy practitioners. Digital advocacy is efficient, effective and and a key component to any strong government relations program.
To many non-profit organization staff and lobbyists, political engagement from the grassroots level to the membership level is essential to meeting policy goals. Digital advocacy is increasingly becoming the source of success for policy victories by purpose-driven groups." (Dan, 2016)[15]

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[15] Ibid.

3   Digital Technology related to the arts

3.1.   Sustainability (Financial and environmental)

3.1.1. Crowdfunding platforms:

Internet websites that provide a way for a large number of people to give money in support of a person, project or entity[16].
Ex. Kickstarter, Indiegogo, Patreon

If you are considering to create an ad hoc fundraising platform/app consider to allow your supporters to use it not only to control the amount they give each month, but also view their donation history, clarify where the money is being spent and read stories illustrating the impact of their contribution.

Ex. My Oxfam

3.1.2. Donor Management System:

"A Means of organizing, analyzing, and strategically implementing communication strategies with nonprofit supporters to maintain and grow relationships." (Stone, 2021)[17]

Ex. Tessitura Software®, Boomerang, Virtuous CRM

3.1.3. Tools that remove obstacles to donating, allowing users to give quickly.

Ex. cashless systems, donate buttons (Facebook, PayPal)

3.2.   How may digital technology be used to make art?

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[16] Adam Weinger, "The Top Crowdfunding Platforms for All Types of Fundraisers," Double the Donation (Adam Weinger https://doublethedonation.com/tips/wp-content/uploads/2018/12/double-the-donation-color-logo.svg, August 11, 2021), https://doublethedonation.com/tips/crowdfunding-websites/.

[17] Lauri Stone, How Rich is the Data? A Loaded Look at Wealth Screening Tools for Nonprofits, 18 January 2021, Opgehaald van Sanmita: https://www.sanmita.com/how-rich-is-the-data-a-loaded-look-at-wealth-screening-tools-for-nonprofits/.

3.2.1. Visual Arts

Best practice: DevArt

"DevArt is art made with code, by developers that push the possibilities of creativity and technology. They use technology as the canvas and code as the raw materials to create innovative, engaging digital art installations.

DevArt is the opportunity to open their creative process, share their art with the world and be a part of a new movement in art.

Google, with the Barbican in London, will commission a developer to create a new digital art installation alongside some of the world's best interactive artists at the Digital Revolution exhibition: the biggest and most comprehensive exploration of digital creativity ever to be staged in the UK. From there, the exhibition will then go on tour to cities around the world." (DevArt, sd) [18]

For more information, visit devart.withgoogle.com.

3.3. How does/has/may digital technology impact on the aesthetics and originality of artmaking?

3.3.1. Article 1

"making art through technology"

by Amund Ulvestad – Multimedia Artist, Musician and Composer (NO)

"YES! Wow! I think we are finally entering the twenty-first century!"

The troll roared, stomping her feet joyfully on the ground, each stomp producing thunderous, boulderlike sounds. It was her first time trying on the troll sound costume I had prepared for her – and the first time anyone at the Croatian National Theatre had ever acted with motion sensors. It was also my first time using these sensors for theatrical sound design, but the novelty of the technology had already worn off a bit (my neighbours suffered three weeks of me stomping around in my studio like a troll). Still, seeing this anything but troll- sized actress tramp about the room, hearing her test out her new stone arms and boulderlike feet, enthusiastically growing into a completely new creature before my eyes and ears, I had to agree with her: it did seem like we were entering a new era.

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[18] DevArt, "DevArt," Gray Area, March 3, 2014, https://grayarea.org/community-entry/devart/.

Technology is, in itself, nothing new. There is a clear line of technological development from the invention of the wheel to the Mars rover – a long series of ideas gradually given physical shape through human labour. The wheel. Could its inventors have imagined its impact on society? Could they envision all the purposes the wheel would fulfil and what other inventions it would facilitate? Did they ever dream of the Mars rover? Probably not. Human societies' development of the wheel has been a long process. In fact, the wheel is still being developed today. And so, it would be a mistake to think of the creation of the wheel as a singular turning point, a dramatic moment that forever changed human society. Rather, it was the other way around: our constantly changing society – our needs, our wants – created the wheel. And new needs, new wants continue to shape it today, all the way to Mars. Human culture and its relationship to technology is just that – a relationship. In which culture informs technology and vice versa.
Today our relationship to digital technology resembles the relationship our Neolithic ancestors had to the wheel.

The digital machine is, at least to most of us, something of a mystery. Like the wheel, it promises to free us from some of our burdens, to make our lives easier and more comfortable; it seeks to inject itself into our very way of living, communicating and working. And still, like the wheel to the people of the Neolithic era, it is a device whose innate properties most of us cannot easily understand and whose future potential we cannot fully grasp. This is precisely why we should interact with it.

The novelty of a new technology – its apparently magical properties – is its least interesting feature. In fact, it is only through deep exploration of a technology – i.e. , by demystifying it and thereby negating its novelty – that we can make any sort of tool or machine that would have potential in an artis- tic context. We, as creative artists, should remember this when working with new technology: only by getting to know the technology, only by getting past its baffling newness, can we produce art with it. But how can we go about doing this?

Consider the sculpture of ancient Greece. We are used to seeing sculptures as white and clean abstractions of, for the most part, the human form. And so, their cold, ethereal white- ness became a symbol of ancient Greek culture, perhaps resonating with our notions of a classical ideal of purity. But now we know that they were all originally painted. Imagine the entire Parthenon in vivid colour: the deep blues, bright reds and shining yellows. To produce a sculpture in ancient Greece was to marry the art of chiselling stone or casting bronze with the art of painting. This begs the question: Was the underlying sculpture seen simply as a three-dimensional canvas, a shape on which the painter could produce art? Or was the sculpture seen as the true art form, the paint merely a final touch, a little decoration? Or were they perhaps considered equally important contributions to a final sculptural 'Gesamtkunstwerk'?

Modern theatre is a similar marriage of art forms. So when an actors walk across the stage reciting a text, we must ask: Is the text their canvas, the underlying structure upon which they produce art? Or are they just a mediator? Maybe the actors themselves are a canvas, dressed as they are in a costume, surrounded by lights, smoke and scenography, and under- scored, perhaps, by

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dramatic music or the sound of distant crows? Or is the performance of the text itself the true art form, the surrounding technological elements merely forms of decoration?

Anyone who has worked in the theatre knows that every production contains an implicit hierarchical relationship between the different art forms that come together onstage, depending on the project and its participants. While one production might be conceived solely as the traditional acting out of a script, others are explorations of specific architectural spaces, bodies or objects; others are still dramaturgically closer to a concert or a conversation or – any imaginable thing. Each of these focuses requires a different approach and organisational structure in which the most essential artistic disciplines within the given project come to the fore and lead the way. This is especially true when exploring new and yet untested technology in an artistic context: because we do not know how it will function and what role it can play; because we cannot lean on conventions when incorporating it into our work. In short, if we really want to explore new technology, we must make it a true exploration. We must invent from scratch both a suitable work methodology and a language for communicating

what we are experiencing and where we want to go. We must make theatre through technology. How can technology tell the story? How can technology itself be theatre?

Circling back to the troll at the Croatian National Theatre, I feel optimistic. Through the staging of Peer Gynt here and The King's Fair at the Norwegian Theatre in Oslo, we have barely scratched the surface of what kinetic sound design and music can be. But the enthusiasm from the actors who are now regularly acting with the technology as well as the reactions from the audience, theatre-makers and artists from other fields bode well for a continued in-depth exploration and development of the technology. We have indeed entered the twenty-first century – and it is still young." (Ulvestad, 2019)[19]

3.3.2. Article 2

"Can digital communication be an aesthetic empowerment of the audience?

by Jan Linders – Head Dramaturge and Deputy General Manager, Badisches Staatstheater Karlsruhe (DE)

Peter Weibel, director of the Center for Art and Media in Karlsruhe (ZKM), makes the following prediction: "Today we applaud the robots. In thirty years, the robots will applaud us." The trinational Stage Your City project was designed to overcome this binary contrast. It is not 'man versus machine', but analogue performance combined with creatively implemented digital technology, which allows for instant interaction, that is being tested as a variant of the theatre of the future.

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[19] Amund Ulvestad, "Making Art through Technology," European Theatre Lab, September 17, 2018, https://www.europeantheatrelab.eu/making-art-technology/.

There is no doubt that we are already digitizing all areas of life: television is only digital; self-learning algorithms suggest news stories, films, songs and friends to us on social media; artificial intelligence will soon control self-driving cars. Many people touch their smartphone more often than their partner. Your device knows you better than a friend, an authority: every preference, every movement, every fingerprint is registered and evaluated. Until now the order in auditoriums and theatres has been, "Please switch off your smartphones!" But isn't theatre – as the pure and final oasis of analogue – closed to a technical development that has long since become a social development? Where would the theatre be today if the Romans had said, "No machines on the stage!" or the people of the Baroque had said, "No backdrops!"; if the visitors of 1880 had said, "No electric lighting!" or the spectators of the 1990s had said, "No video please!" Up to now, theatre has virtuously added every technique to its range of means of expression, without neglecting the essential: the people on stage. So we must ask ourselves: How can digital processes be used artistically? How can the role of the audience be expanded digitally?

These questions were the starting point of Stage Your City – a European Theatre Lab project headed by the European Theatre Convention. ETC had submitted several funding applications to the EU to develop forms of a theatre of the future. Only applications that listed 'digital' as a keyword were successful. Theatre people from Nancy, Tbilisi and Karlsruhe developed the dramaturgy for a digital/analogue, multi- perspective tour of the city of the future in several OpenLabs at the Médiathèque Manufacture Nancy, the Ars Electronica Center in Linz and the ZKM Center for Art and Media in Karlsruhe. The texts were written by the Lasha Bugadze, Marie Dilasser, Frédéric Sonntag and Konstantin Küspert.

The audience meets in a black box and encounters four experts from 2052, each of whom represents a moral challenge for the next thirty years: love in times of total simulation, immortality through medical technology, identity without historical memory, security through total surveillance.

Guided by an app and divided into four groups of twelve people each, the audience comes to four stations in succession. On the way, the experts use audio commentary to delve even deeper into their problem; this soundtrack transforms the city and its inhabitants into a future dystopian backdrop.

At four stations (a gate, a café, a library and a doctor's surgery) at each venue, the audience gets together with virtual and/or real actors and is encouraged to interact. They send a photo, a selfie, a personal love song and a short text via the app to the net.

Back in the black box of the theatre the audience gets to meet themselves. The pictures they sent appear in a 360-degree film accompanied by a mix of the love songs. In the end, there is a real person – a little girl – as the embodiment of the master gives the people of the future love, immortality, identity and security.

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When selecting the digital techniques that the trinational team wanted to acquire artistically, it followed the advice of Gerfried Stocker, the artistic director of the Ars Electronica Center: to offer all visitors a valid experience, not just rely on one technology, take technical problems into account, and not become dependent on a solution. Many projects rely on a single technique and use it to its full potential. We preferred to experiment with many new technologies and test possible artistic applications. The focus is not on technology, but on the history of the common migration into the future of the cities.

A 360-degree film on the project page www.zigmagora.eu introduces the audience to the topic and invites them to download the app. The technical rooms of the Karlsruhe State Theatre serve as a futuristic backdrop. Many viewers experience the amazing possibilities of their smartphone for the first time: the picture follows the movement of the smart- phone up, down and in all directions.

The four experts from the future introduce themselves in an installation by media artist Chris Ziegler: eight iPads on stands are arranged in a circle and use overlay technology to suggest to the standing or moving viewer inside that someone is talking to them.

The virtual actors in the city only become visible to those who hold their smartphones on a poster with a hidden code. Using this augmented reality technique, the actors can play with themselves or colleagues who were filmed previously.

For the final picture, a programme developed by Bernd Lintermann of the ZKM puts together the pictures produced by the audience into a three-dimensional sphere inside, which can be experienced with the help of a simple cardboard attachment for the smartphone.

The audience thus experience their own city in a new way, discuss problems of technical progress and have experiences with the theatrical use of digital technologies that most of us have never experienced or used before – they can thus get involved in two senses. This too is 'Volkstheater' in Karlsruhe: the digital empowerment of the audience to participate." (Linders, 2018)[20]

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[20] Jan Linders, "Can Digital Communication Be an Aesthetic Empowerment of the Audience?," Publications | European Theatre Convention, 2018, https://www.europeantheatre.eu/publication/can-digital-communication-be-an-aesthetic-empowerment-of-the-audience.

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4 The Digital Divide

4.1. How does digital technology exacerbate inequality?

"The relationship between technology and inequality is multifaceted. Technology has enhanced productivity, accelerated economic growth, enabled knowledge and information sharing, and increased access to basic services. However, it has also been the cause of inequalities. inequality of outcome; inequality of opportunities; and inequality of impact, which is concerned with the impact of environmental hazards on the most vulnerable." (United Nations ESCAP, 2018)[21]

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[21] United Nations ESCAP, "Technology and Inequalities" (United Nations ESCAP, May 2018), https://artnet.unescap.org/sti/publications/books-reports/technology-and-inequalities-ch4-inequality-asia-and-pacific-era-2030.

5   Digital Safety

5.1.   Digital Data

"National authorities should be mindful that precisely because personal data may contain valuable information about the social interactions and recent movements of infected people, they should be handled responsibly. Overriding consent and privacy rights in the name of disease surveillance may fuel distrust and ultimately turn out to be disadvantageous. There have been reports that China's digital epidemic control might have exacerbated stigmatization and public mistrust. This risk of mistrust is even greater in countries in which citizens place a much lower level of trust in their government, such as Italy, France and the USA. Therefore, whenever access to these data sources is required and is deemed proportional, the public should be adequately informed. Secrecy about data access and use should be avoided. Transparent public communication about data processing for the common good should be pursued. Data-processing agreements, for example, should disclose which data are transmitted to third parties and for which purpose." (Ienca & Vayena, 2020)[22]

The online format is a good strategy because it is less restrictive for people to join in. It is also reducing our carbon footprint. Maybe we should be developing hybrid forms of festivals that cater for the physical and online aspect.

Online networking has developed at a much faster rate. Postponing festivals or moving international cultural exchange online. This creates problems with their intellectual property. Art works can be created online, but it is not a replacement to the physical form. Many events were cancelled, and we do not know how to program international collaboration or cooperation. Various plans have to be jotted down because artists need to be paid. Effect on international exchange has been that we need to have more preparations – take it online, be more flexible, in online meetings are now deeper since everyone is understanding the similar difficulties being felt the world over. Social media audience increase the number.

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[22] Ienca, Marcelo, & Effy Vayena. On the responsible use of digital data to tackle the COVID-19 pandemic, 01 April 2020, Opgehaald van Nature Medicine: https://www.nature.com/articles/s41591-020-0832-5;#citeas.

6 Festivals in a time of COVID-19

6.1. Challenges encountered by Festivals in a time of COVID-19

- It is difficult to be flexible and come up with solutions and mind frames to fit within the restrictions, but it is important to do a version of the festival during this time, for public engagement.
- When festivals do not count on ticketing, and target smaller audiences, the impact is felt less, but at the moment we don't know how they will behave.
- There is a risk that audiences are too scared to attend and interact. At the moment, theatres are closed but shops are full, which makes one question how much art and culture is valued.
- There is a certain amount of uncertainty when waiting for answers from procrastinating partners.
- When programming, managers have to be more patient and flexibility were needed, because of quickly changing conditions and restrictions.
- Some decisions are made taken 'in the dark', without knowing the exact situation we will be facing on the day.
- Venue changes are being proposed by governments, councils and entities. These are bigger, rural and outdoor spaces, for more social distancing. The challenge is to make audiences want to attend there.
- Find venues that fit within the new health measurements is quite challenging but not impossible.

6.2. How have festivals dealt with restrictions caused by the existential threats posed by COVID-19?

Having had more time to rethink, one realises the importance of delegation. For example, have somebody to interact with different partners, throughout the year. Relationships need to maintain a relationship with artists, sponsors and communities. Assigning duties to your team, however small, is essential, especially when it comes to the sustainability and accumulative benefits of the message you are trying to convey with your festival.

The ability to be flexible while programming, thus accommodating to the current needs, is a skill that is quite beneficial to festivals. We can start showcasing these skills to policy makers and other governing entities. This is a result of stopping and listening to the needs of the communities around you, making you more relevant and essential as an artist and as a festival.

All the technological skills acquired, being more open to go online and having a reserve (contingency) to pay people working with you if something happens (a core fund that supports the

people that work with you) have all been strategies that served many festival managers globally during this pandemic time. These skills have made us more robust during these taxing times.

Festivals had to have a more flexible identity – if you cannot be cultural, be social! We also need to know who we are very well (specificity of your product) so that then we are able to move with the needs of the communities around your festival.

We are addicted to do what we have always been doing. So, we need to also be doing what needs to be done. Capturing the contemporary real needs from the festival's context and community.

6.3. How has COVID-19 and its related restrictions impacted on the curation   and programming of a Festival in particular?

The ability to be flexible while programming, thus accommodating to the current needs, is a skill that is quite beneficial to festivals. We can start showcasing these skills to policy makers and other governing entities. This is a result of stopping and listening to the needs of the communities around you, making you more relevant and essential as an artist and as a festival.

6.4. What are the particular challenges and opportunities for festivals that have shifted to online platforms as the result of Lockdown restrictions?

6.4.1. Challenges:

- Finance: performance shooting and live streaming need stronger financial support, both for equipments and labour. However, the economic situation during and after Covid-19 makes fundraising more difficult; Finances invested in digitisation can cause a deficit in project implementation and thus lower the quality of the project.
- The authenticity may decrease when the performances are delivered online.
- Internet access and connection.
- Lack of interest resulting from the inability to provide a complete experience online.
- Different time zones.
- Shortage regarding crews.
- The lack of interactive communication/ experience.
- Expertise about online esthetics and presentation skills

6.4.2. What is lost by festivals going online?

- Festivals could be losing momentum / interest - income might be lost (lower support from partners)
- Lower income from tourism for community at large. E.g. the cancellation Cannes, Avignon, Edinburgh Fringe Festival will have affected the whole cities
- Online platform monetizing on their increased traffic, while artists and festival managers are not sharing from this profit.
- Screen exhaustion and possible lack of engagement in the performance as a viewer.
- Exact numbers of audiences are not accurate

6.4.3. What is gained by online festivals?

- Potentially wider audiences: more global. If events have tickets, that might be a new source of income.
- New voices might be featured, and new art forms are given a bigger platform (e.g., bedroom DJ's)
- "Homemade aesthetic" makes for more accessible art forms (e.g., Zoom party, since everyone is online watching or performing from a home environment)

6.4.4. Opportunities:

- to reach wider audiences.
- to establish a new aesthetic.
- to realise international collaboration/co-production via online technologies.
- to create new experiences, like interactional videos, which could be watched from the angle you choose.

6.5.   Which learnings and strategies undertaken by Festivals during the COVID-19 era be taken forward beyond these times, and be integrated into Festivals in the future?

Rigorous training in the use of online platforms might serve artists and festival managers in the future: this infrastructure is well needed, especially if this is to happen again.

We are working more internationally, because we felt the need. We need to continue communicating with each other, with local and international collaborators to be stronger and prepared.

We need to sustain the feeling of solidarity and humility which came from reaching out to each other more, genuine interest, and directors and festival managers listening more to their audience.

6.5.1. Learnings & Strategies:

- Festivals that are specially made for digital experience.
- Filming and live streaming our festivals to reach more potential audiences.

7 Case studies & Best practices

7.1. Digital Festivals

7.1.1. Ars Electronica

"The first Ars Electronica begins on September 18, 1979. 20 artists and scientists from all over the world gather at this new "Festival for Art, Technology and Society" in Linz to discuss the Digital Revolution and its possible consequences. This Ars Electronica is small, but groundbreaking. The initiative for this came from Hannes Leopoldseder (AT), director of the Upper Austria regional studio of the Austrian Broadcasting Company (ORF), who is passionate about everything that has to do with the future. Together with the electronic musician Hubert Bognermayr (AT), the music producer Ulli A. Rützel (AT) and the cyberneticist and physicist Herbert W. Franke (AT), he lays the foundation stone for a festival that will become the world's largest and most important of its kind." (Art, Technology, Society, 2021)[23].

Official website: https://ars.electronica.art/outofthebox/en/

7.1.2. Fak'ugesi African Digital Innovation Festival

''Fak'ugesi African Digital Innovation Festival is at the forefront of Africa's culture and technology scene. Explore what we stand for and how our journey evolves. The Fak'ugesi African Digital Innovation Festival is rooted in showcasing and developing skills in technology, art and culture in Africa. Founded in 2014 as a collaboration between the Tshimologong Digital Innovation Precinct and the Wits School of Arts, Digital Arts Department, the festival takes as it starting point the idea that in order for innovation with technology to succeed, a strong connection needs to be made to African cultural practices and creative encounters'' (Fak'ugesi Africa Digital Innovation Festival, 2021)[24].

Official website: https://fakugesi.co.za/

7.1.3. Re-connect Online performance Festival - Iran

''Re-connect Online is a new digital festival with an open call/ new work for the digital space, in response to the lockdown situation in Iran. The organizers consulted a lawyer to check restrictions. Funding was done through a Facebook page, but because of economic sanctions, access to this

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[23] Ars Electronica, "Mission," About Ars Electronica, accessed November 3, 2021, https://ars.electronica.art/about/en/.
[24] "About Fak'Ugesi Festival," About | Fak'ugesi, accessed November 3, 2021, https://fakugesi.co.za/about/.

money is limited. They are thinking of shifting it away from Iran. Also, in the next editions, which are already being foreseen, they would like to have in place a software to bring different platforms together. They have been using Instagram as a platform'' (Re-connect Festival, 2021)[25].

Official website: reconnectfestival.com

https://www.instagram.com/reconnectfestival/
https://www.facebook.com/Reconnectfest/

Speaker	Sepehr Sharifzadeh www.nhtheatreagency.com Sepehr is a Tehran based independent producer, curator, and festival organizer, he was an alumni of the Atelier for Young Festival and Cultural Managers in Shanghai in 2017. He has studied M.A. of Puppetry at University of Tehran with his Thesis on "Standardization of Puppet Theater Festival based on PMBOK method" and has co-founded the first International Theater agency in Iran; aiming to facilitate the cultural exchange between Iran and the world through performance. He recently co-founded the "Re-connect Online performance Festival" in light of Coronavirus global pandemic.
Purpose	Re-connect is about creating a new digital festival with an open call. New work is specifically created for the digital space.

Curation	The lack of policy on digital creations and festival in Iran raised many question
	Sepher explains how they dealt with curating a digital festival, taking into account the social and moral codes
	   - Designing an open call
	   - Approaching artists who would volunteer

Audience	For this first edition they opted for widely known platforms Facebook, Instagram and Youtube.
Financial Sustainability	This is the first Pro Bono edition for the festival, meaning it is based on volunteer work. The context in Iran would not allow to monetize digital formats.

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[25] "Reconnect Festival," About, accessed November 3, 2021, https://www.reconnectfestival.com/about.

	In order to have a sustainable funding system the Online Festival would have to be moved out of Iran, to for example a partner organization in San Francisco. Sepher explains this further:

7.1.4. Killaloe Music Festival

Nestled between the historic twin towns of Ballina-Killaloe, St. Flannan's Cathedral welcomes the 9th Annual Killaloe Music Festival on June 4th-6th 2021. This year's reimagined programme will invite an international audience through a very special series of free live stream events.

Artistic Director, Katherine Hunka has created a festival like no other, supporting Irish musicians from around the globe to join in the celebration of music.

Official website: https://killaloemusicfestival.com/

7.2. Physical Festivals moving online

7.2.1. Gateshead International Festival of Theatre (GIFT)

''Placing artistic experimentation and collaboration at its core, GIFT's annual three-day festival offers a supportive platform for artists to come together, to push the boundaries of their practice. International in scope and interconnected in approach, GIFT is a carefully curated conversation, providing a meeting point for meaningful exchange between artists and audiences based in Northeast England, and the wider world.

Founded in 2011 by Festival Director Kate Craddock, in response to a gap in the regional cultural offer, GIFT is committed to presenting contemporary and experimental practices that otherwise wouldn't be seen in the Northeast.

The festival supports artists at all stages of their careers, enabling them to use GIFT as a space to come together, to take risks, and test out new ideas. We embed opportunities for audiences to get involved, and to connect with artists and their work across all festival activities.

GIFT links otherwise disparate organisations and locations - with events traversing the culturally regenerated Gateshead quayside and the commercially redeveloped town centre - and beyond. GIFT serves as a direct response to a location in transition and flux (GIFT Festival, 2021)[26].

Official website: www.giftfestival.co.uk

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[26] Gift Festival, *About*, accessed November 3, 2021, https://www.giftfestival.co.uk.

Speaker	Kate Craddock Kate is Founder and Festival Director of GIFT: Gateshead International Festival of Theatre, an annual artist-led festival celebrating contemporary theatre. She is based in Newcastle, North-East England. Through GIFT, Kate presents a program of contemporary theatre and performance that otherwise would not have a platform in North East England. Kate works closely with partners including BALTIC Centre for Contemporary Art and Gateshead Council to deliver GIFT.
Purpose	GIFT is about trying to get people together and give them an opportunity to connect. Bringing artists and audiences together, supporting artists through a creative dialogue moving from a real-life program to a digital space. Moving to a digital space makes the experience more accessible and available for all. It becomes more collaborative in a way.
Possibilities	There is already an existing community/audience and key artists that have been engaged with the festival before, now they need to be moved to the digital space. But there is also the possibility of a new community that you can engage – globally/ internationally etc. Past, well recorded shows can always be uploaded.
Audience	A couple of things that were taken into account: - Accessibility: Online festivals need to be accessible in terms of impairments and disabilities - Computer illiteracy problem: It makes the economic gap even more apparent because some people do not have access to devices. A film festival in Ireland is thinking of bringing the films on CD for audience members who might be less computer literate In order to engage conversation with the audience a lot of works were being reimagined.

	"Making a theatre festival work solely online requires a heavy dose of trust, ingenuity and imagination. Impressively, all of the artists originally commissioned are still involved in GIFT, offering a variety of adapted, pre-recorded and deliciously low-fi experimental work." – Kate Wyver - The Guardian Full article available via The Guardian

7.2.2. The Festival of Live Digital Art (FOLDA)

"FOLDA began in 2018 in Kingston, Ontario. It has grown each year since its inception and continues to seek new and innovative ways of supporting digital practice. We've grown quickly over the past 2 years and are grateful for the continued support of our audiences'' (The Festival of Live Digital Art, 2021)[27].

https://www.folda.ca/

Purpose	We aim to be an exciting incubator for an emerging art form where audience feedback plays a key role throughout the creative process. (Folda History, sd)[28]
Curation	The festival incorporates a three-stage iterative development model borrowed from software design to present and engage with these works: ALPHA: Performances in their earliest stages, ready for internal testing, but require audience feedback to spark the next stage of development. BETA: Performances ready for public testing to refine the audience experience. GO: Performances ready for production release. Audience input contributes to improvements and bug fixes just like your favourite app. • Works in ALPHA one year, can return to FOLDA to as a GO the following year. • Works in BETA can be picked up by other presenters to be GO at other festivals. (Folda History, sd)[29]
Possibilities	This approach makes FOLDA unique by providing artists with creative opportunities that support work in various stages of development, matching the demands of how digitally-engaged performance is created. It allows presenters the opportunity to engage with and track work throughout their development process, offering more organic and informed partnerships to develop works beyond the festival." (Folda History, sd)[30]

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[27] "The Festival of Live Digital Art," FOLDA, accessed November 3, 2021, https://www.folda.ca/about-us/.
[28] Ibid.
[29] Ibid.
[30] Ibid.

7.2.3. Bouge B – curated by deSingel

BOUGE B 2021 sweeps you up in an online and offline edition in which in which new talent, installation art and performance take centre stage. Jointly curated by our **Creative Associate Jan Martens,** this alternative version of the festival promises to transport you to virtual and hypnotic realms.

You can experience **Jan Fedinger, Anne-Lise Brevers and Siska Baeck & Maya Callaert** online in OnLive screenings. You'll discover the work of **Anne-Lise Brevers** on our **blog**. And for **Karel Burssens** you need to come in person to deSingel. For Karel Burssens you'll need to reserve in advance

In light of the COVID measures, it will not be possible for us to feature the originally curated work by Baptiste Cazaux, Anne-Lene Nöldner, Femke Gyselinck, Cherish Menzo, Michele Rizzo and Steven Michel. Neither, sadly, can we present the concerts by Fulco, Namid & Sondervan, Robbing Millions, Rrucculla and Dyce. Unfortunately the lockdown is also keeping BOUGE B under its spell.

Official website: https://desingel.be/en/programme/dance/bouge-b-lockdown-edition-co-curated-by-jan-martens-grip.

7.2.4. Chicago Humanities Festival

The Chicago Humanities Festival connects people to the ideas that shape and define us, and promotes the lifelong exploration of what it means to be human.

We present smart and entertaining programming about ideas that matter. We shape ideas, helping our audiences see the world differently. We help them challenge the boundaries of contemporary knowledge and culture. We help them understand what it means to be human.

Over the past several years, we have grown from a one-day celebration of the humanities into a year-round festival of arts and ideas. We present more than 100 events annually, in venues across the Chicago area (from Evanston to Englewood, the Loop to the South Shore), including two festivals (Fall Festival, Spring Festival), and partnerships with the region's most prestigious cultural institutions and universities.

Official website: https://www.chicagohumanities.org/about/
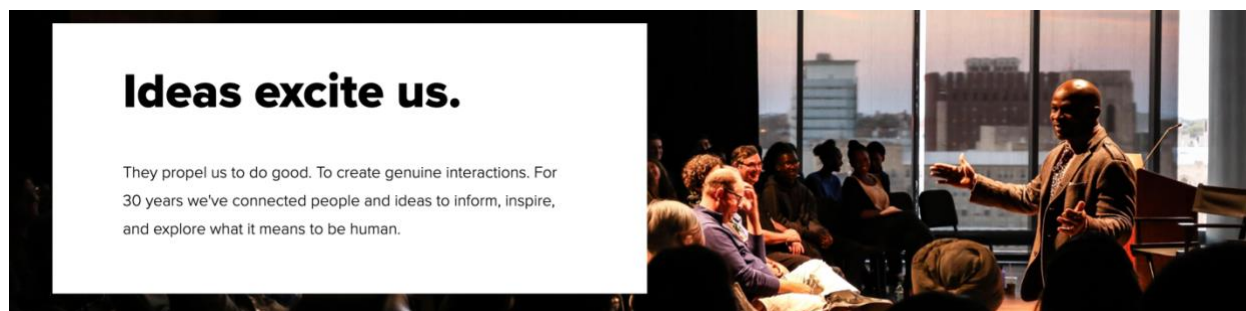
7.3. New Digital Platforms

7.3.1. Athens Digital Arts Festival (ADAF)

''Athens Digital Arts Festival (ADAF) is an International Festival which celebrates digital culture through an annual gathering bringing together a global community of artists and audiences. Athens Digital Arts Festival aims to encourage, stimulate and promote all aspects of digital creativity by hosting local as well as international artists and communities.

Through its multidisciplinary program Athens Digital Arts Festival offers a wide range of Exhibitions, Screenings, Live Performances, Workshops and International Tributes showcasing artworks that display distinctive characteristics of the digital medium and reflect on its language and aesthetics.

Athens Video Art Festival was founded in 2005 with the intention to offer a platform to video art, installations and live performances. Within the following 10 years, the Festival gradually evolved and included more art forms, such as web art, interactive installations, animation, digital image, performances, applications and workshops, exploring creative aspects of technology and digital culture.

In 2012, the Festival introduced the subtitle "International Festival of Digital Arts & New Media" in order to communicate the wide spectrum of its activities and events. As of January 2015, the Festival changed its name into Athens Digital Arts Festival (Athens Digital Arts Festival, 2021)[31].

Official website: https://www.adaf.gr/

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[31] "Athens Digital Arts Festival - ADAF," About us, accessed November 3, 2021, https://www.adaf.gr/.

6.3.2. Nite Hotel

National Interdisciplinary Theater
Online theater platform
Official website: https://www.nitehotel.nl/
Swan Lake: The Game: https://vimeo.com/471118219

Speaker	Guy Weizman
Curation	Many questions were raised after the lockdown. After refusing to stream the results of a two-year long process, they decided to include a film crew on stage with the performers and experiment.
Execution	They started developing virtual theater, a 3D website: The Nite Hotel: A place that includes the most basic ideas of a theater which includes following elements: - Meeting people; - Watching performances; - Leave inspired. A virtual theater, a gallery space that includes a context program and a virtual bar where people could meet each other and talk.
Possibilities and collaborations	Experiencing community: Being fortunate with the funding of the Dutch government and having a digital platform gave the to create "The 24-hour Carousel": reaching out to many different organizations all over the world and share their platform with these artists and creators.

6.3.3. Bacardi NH7 Weekender festival

Official website: https://nh7.in/

Speaker	Gunyan Arya
Curation	This is the only festival of its kind in India. The original festival consisted of multiple stages with different genres and a massive food court in the middle. When taking this online all these aspects had to be translated.
Sustainability	They rely on their brand partners as ticket revenue in India is very low

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7.3.3. FarOffa festival

"FarOFFa appears as a proposition that seeks to expand public access to the capital's artistic productions, in their diversity of languages, themes and discourses.

The aim is to bring visibility to the countless collectives that tirelessly produce a vibrant and provocative cultural scene. And also create new modes of production that strengthen the resistance of art in Brazil. FarOFFa seeks to constitute itself as a management model and a collective space of possibilities for the dissemination and circulation of creations, ideas and artistic encounters'' (FarOffa Festival, 2021)[32].

Official website: https://en.faroffa.com.br/novo

https://www.facebook.com/faroffasp//
https://www.youtube.com/watch?v=sn-Q1Aac-VM

Speakers	Pedro de Freitas Gabi Gonçalves
Gabi: *Curation*	FarOFFa is not festival but rather a "meeting" The most important thing about FarOFFa is that all of its crewmembers are producers, hey co-create on fund themselves. This brings independency and artistic freedom.
Pedro: *Curation*	FarOFFa is a reflection on how they, as a cultural environment, want to be treated. Pedro discusses how the independency of FarOFFa gives them freedom and power in production and development.
Collaborations with artists	They started out with 30 artists and ended up with 170, due to the strong feeling of togetherness of community

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[32] "FarOffa Festival," FarOffa, accessed November 3, 2021, https://en.faroffa.com.br/novo.

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7.3.4. MIRA digital Arts Festival

"MIRA is a digital arts festival based on three interconnected areas: exhibition, dissemination and education, and is held annually in Barcelona (since 2011) and Berlin (since 2016). Focused on the intersection between arts and digital culture, the festival features a programme comprised of audiovisual shows in both traditional and full dome formats, digital art installations, screenings, conferences and workshops'' (Mira Digital Arts Fesival, 2021).[33]

Official website: https://mirafestival.com/en/

7.3.5. Performance Dream

Royal Shakespeare Company (RSC), in collaboration with Manchester International Festival (MIF), Marshmallow Laser Feast (MLF) and Philharmonia Orchestra will stage a live performance of Dream using motion capture as the culmination of a major piece of cutting-edge research and development (R&D)

The pioneering collaboration explores how audiences could experience live performance in the future in addition to a regular visit to a performance venue. Dream was due to open in Spring 2020 as an in person and online live performance and has been recreated during the pandemic for online audiences whilst theatres remain closed. The project is one of four Audience of the Future Demonstrator projects, supported by the government Industrial Strategy Challenge Fund which is delivered by UK Research and Innovation.

Official website: https://audienceofthefuture.live/dream/

7.3.6. Marshmellow Laser Feast

Marshmallow Laser Feast are the immersive art collective bringing you closer to nature. Coventry is this year's UK City of Culture, and as part of an ambitious bid to become the greenest ever recipient of the award has launched a flagship programme of environmentally-minded artists. At the heart of this initiative known as Green Futures are Marshmallow Laser Feast, one of the country's leading immersive art collectives whose ambitious installation attempts to dissolve any barriers between ourselves and the natural world.

Official website: https://www.marshmallowlaserfeast.com/

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[33] ''Mira Digital Arts Festival," MIRA, accessed November 3, 2021, https://mirafestival.com/en/.

7.3.7. Vilnius National Philharmonic Digital Hall

The goal of this project is bringing audience as close to music as possible. The creation of digital concert hall does not aim to replace the real one. Concert attendance is a process of multiple layers. It covers live participation, real-time emotions, social life, possibility of sharing impressions here and now, historical atmosphere of the hall itself.

Official website: https://nationalphilharmonic.tv/en/

7.3.8. Filmocracy – Film & Festival Streaming Platform

Filmocracy has thousands of the best independent films and hosts multiple virtual film festivals every month from around the world. Each virtual film festival has its own unique festival village complete with original programming, panels, director Q&A's, and live networking opportunities. It's never been easier to walk the red carpet!

Official website: https://filmocracy.com/landing

7.4. Discussion Panels, Events & Other initiatives

7.4.1. How is COVID-19 shaping our arts and festival world and/in the digital space

The panel **How IS COVID-19 shaping our arts and festival world and/in the digital space** was the opening keynote of the Digital (Re)volution training promoted by The Festival Academy. In the panel, watch the speakers Dr. Tegan Bristow (South Africa), Rashmi Dhanwani (India), Martin Honzik (Austria) and Mark Russel (USA) as they share their thoughts and reflections on how COVID-19 is shaping our arts and festival world and/in the digital space.

Click here to watch the panel.

7.4.2. Digital festivals that worked and festival that didn't

The panel **Digital festivals that worked and festivals that didn't** was part of the second day of the Digital (Re)volution Training promoted by The Festival Academy. In the panel, watch the speakers Marion Louisgrand Sylla (Senegal), Natália Machiavelli (Brazil) and Dharam Saraviya (India) as they share their thoughts and reflections on festivals that worked and festivals that didn't: lessons from the digital world – digital and/or hybrid festivals, how to run a digital festival, which tools to use, how to engage your audiences, how to monetise it, how to evaluate the audience experience and much more.

Click here to watch the panel.

7.4.3. Research on the digital festivals world from a across-sector perspective

The panel **Research on the digital festivals world from a cross-sector perspective** was part of the third day of the Digital (Re)volution Training promoted by The Festival Academy. In the panel, watch the speakers Brett Pyper (South Africa), Christine Van Winkle (Canada), Manon Muti (Netherlands) and Hooman Nassimi (Netherlands) share their knowledge on research about the contemporary digital (arts/festival) world from a cross-sector perspective: academic field, journalism, human rights activism in relation to audiences, performances, platforms, digital safety, and more.

Click here to watch the panel.

7.4.4. How to move a festival online? – Working Session

Can festivals adapt to digital space? How do you curate an online festival? How do you engage the audience? Can you make a digital festival financially sustainable? This discussion looked at what happens to festivals and the arts when we could no longer gather as people. Sharing examples of digital art and online festivals, the participants explored the pros and cons of digitizing a festival and offer advice on the practicalities of moving performance online.

Speakers: Kate Craddock (GIFT - Gateshead International Festival of Theatre - United Kingdom), Sepehr Sharifzadeh (NH Theatre Agency - Iran); Nima Dehghani (Transdisciplinary Artist - United States/Iran), Asif Majid (Scholar, Artist and Educator - United Kingdom)

Moderators: Angele Galea (Artistic Director - Science in the City, Malta); Nada Shemais (Cairotronica).

For more content: Link 1 | Link 2

7.4.5. Back to Live: Programming in the Era of Physical Distance

After just a few weeks of confinement, we were already forming new habits: hosting birthday parties online, going online to watch performances, crossing the street to keep our physical distance... How would we come out of this? What steps could we take to rebuild trust and invite people from different households to share an experience together?
Speakers: Fergus Linehan (Director and Chief Executive Edinburgh International Festival - United Kingdom); Rucera Seethal (Artistic Director of National Arts Festival Grahamstown - South Africa).

Moderators: Erica McCalman (Art Oracle - Australia); Fanny Martin (Art of Festivals - Canada).
For more content: Link 1 | Link 2

7.4.6. Hybrid Events Etiquettes

In June 2021, The Festival Academy organized its first hybrid atelier. The Atelier Düsseldorf/Theater der Welt counted with half of participants in-person and half of it attending online. To organize the event, TFA created a simple guide for hybrid events etiquettes:

Atelier Düsseldorf/Theater der Welt

— Hybrid event etiquette —

In person participation

- Keep your mask on at all times when you are **standing up and/or moving**
- You can keep your mask off when you are **sitting down**, while keeping the 1.5m distance from people around you

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In person participation

- Keep your personal microphone(s) off **during all plenary sessions**
- If you want to make questions, send them via **chat** and the moderator will ask them to the speaker(s)
- Keep your mobile phone **on silent mode**
- In the working group/roundtable or one-on-one sessions, you can **spread out into rooms**
- For the yoga and meditation sessions, you are welcome to do them from the park area around the tent

Online participation

- Keep your personal microphone(s) off **during all livestreamed plenary sessions**
- If you want to make questions, send them via **chat** and the moderator will ask them to the speaker(s)
- On non-livestreamed plenary sessions, you are welcome to address your questions directly to the speakers
- In the working group/roundtable or one-on-one sessions, you can **keep your microphone on** if you wish to
- For the yoga and meditation sessions, you are welcome to do them with your camera off if you prefer

7.4.7. AC/E Digital Culture Annual Report

Acción Cultural Española (AC/E) is a public institution that fosters and promotes culture through a wide-ranging programme of activities and initiatives designed to encourage the mobility of professionals and creators. We bring this same spirit to the AC/E digital culture annual report, a publication that sets out to promote digital internet culture. Our aim is for it to help sector professionals and creators understand how to incorporate digital technologies into their work. If the culture sector gains the skills and capabilities to work actively on the internet and furnish it with cultural content, between all of us we will succeed in giving culture a prominent presence in this great virtual public space.

The AC/E Annual Report is an annual document of reference that analyses the development of digital trends in the world of culture and focuses on a specific sector or discipline each year.

The annual report is structured into two main parts. In the first professionals and specialists from the digital sector carry out a cross-cutting analysis of digital trends in the world of culture, addressing all the cultural disciplines. The second part identifies and defines cases of good practice in the use of digital technology, both national and international, in a specific cultural sector—the performing arts in 2014, museums in 2015, cultural festivals and professional

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meetings in 2016, cultural heritage in 2017, readers and books in 2018, and creators and authorship in the digital age in 2019.

To access the reports: https://www.accioncultural.es/en/ace-digital-culture-annual-report

7.4.8. OHME

Founded in 2017 by a team of engineers and culture professionals, Ohme is an organisation developing new practices of scientific mediation, interdisciplinary artistic creation and innovation, through collaborative practices.

Ohme investigates the boundaries between artistic and scientific disciplines, re-designing practices and contributing to the development of new understandings of interdisciplinarity, with a keen interest in education, co-creation and sharing of knowledge.

By bringing together established and emerging artists, scientists, researchers and students, Ohme develops performances, installations, multidisciplinary events and academic programs on a variety of subjects, spanning from physics to music, from neurosciences to digital arts, from design to social sciences.

The activities of Ohme are divided between a production company, curating and producing performances, installations and events (**Ohme Studio**) and an educational and research institute developing academic programs and igniting transdisciplinary research (**Ohme Academia**). We also propose a series of tailored-made activities and services to artists, scientists, schools and companies (**Ohme Services**).

Official website: https://ohme.be/

8.   Tools for audience/community engagement

8.1.   IT tools to reach new audiences (youth, refugees/migrants, minorities, marginalised communities, etc)

8.1.1.   Newsletters/email communication: best tools

- Social Media Management

Tools: **Hootsuite, Google Analytics, Iconosquare**

- Email Management

Tools: **Mailchimp**

8.1.2.   Festival apps: best case examples

- Local Wifi Connections or Geolocalisation providing site-specific content

Online Scavenger Hunts with Smartphone
Tools: Goosechase

- Live Streams, some of which can be interactive

Augmented Reality
Tools: Apple AI Kit or Google ARCore

- Wristbands Systems which manage Festival Accesses and Cashless Payment

Info Bots

- Survey software or websites

Tools: SurveyMonkey, Google Form

8.2.   Tools for Festival management, Coordination and Organization

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8.2.1. Management of data

- Forms Management for large amounts of data collections from multiple resources.
E.g.: Jotform, Wufoo, Google forms

- File Management.
E.g.: *GG Drive, Efficy, Dropbox*

- Website Management.
E.g.: *WordPress, Squarespace, Wix*

8.2.2. Management of staff and volunteers

- Human resource management for staff & volunteers, rosters, pay, identity, location.
 E.g.: *Deputy*

- Multilingual staff / communications.
 E.g.: *Google translate, Deepl.*

- Instant messaging and internal communications.
E.g.: *Slack*

8.2.3. Project management

- Project Management Software - task lists, timelines, updates, to do lists.
E.g.: *Teamwork, Basecamp, JIRA, Trello, Asana*

- Planning and project management software.
E.g.: *Logistics, datafest*

- Technical Management for ease of sound and lighting operation.
E.g.: *QLab*

8.2.4. Financial management

- Financial Management.
E.g.: *Xero, Logistics (purchase orders, payment, software), Budget (Zahara), Expense reconciliation (expensehold)*

8.2.5. Online platforms to support the making and distribution of the arts

Playwave

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''Playwave is an experimental space creating connections between young people and the arts, through immersive online and curated in real life experiences.

We know that it's not always easy to get to the gigs you want to see. Ticket and transport costs stack up and you end up missing out. With Playwave, there are lots of ways that you can get involved, whatever your budget, and multiple payment methods to make it easy – because the best stuff can't always be free." (Playwave, 2018)[34]

Official website: https://playwave.com.au

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[34] "What Is Playwave?," Playwave, accessed November 3, 2021, https://playwave.com.au/pages/what-is-playwave.

9. Conclusion

With the adaptability of festivals due to the impossibilities of organizing physical festivals in the COVID-19 context, the use of digital technologies for online and hybrid festivals is becoming more and more a reality. Online platforms and tools are already shaping the way we live and re-defining the festival industry.

While this adaptation can bring to the fore quite some challenges, it also rooms for opportunities for festivals to be developed in an innovative and creative way. Digital technologies can have an enormous impact in amplifying experiences and enhancing festivals' outreach.

We trust that some of the ideas in this Toolkit and the experience of other festivals that innovated with new digital technologies, apps and online platforms, will resonate with readers and will encourage and inspire them for future editions of their festivals.

10. References

"Fak'Ugesi Festival." About | Fak'ugesi. Accessed November 3, 2021. https://fakugesi.co.za/about/.

"Reconnect Festival." *About*. Accessed November 3, 2021. https://www.reconnectfestival.com/about.

"Roam-X Indicators." UNESCO, September 1, 2021. https://en.unesco.org/internet-universality-indicators/roamx-indicators.

"The Digital Deciders." New America. Accessed November 12, 2021. https://www.newamerica.org/cybersecurity-initiative/reports/digital-deciders/internet-governance-and-todays-context/.

"What Is Playwave?" Playwave. Accessed November 3, 2021. https://playwave.com.au/pages/what-is-playwave.

Weinger, Adam. "The Top Crowdfunding Platforms for All Types of Fundraisers." Double the Donation. Adam Weinger https://doublethedonation.com/tips/wp content/uploads/2018/12/double-the-donation-color-logo.svg, August 11, 2021. https://doublethedonation.com/tips/crowdfunding-websites/.

Ars Electronica. "Mission." About Ars Electronica. Accessed November 3, 2021. https://www.adaf.gr/about/.

Athens Digital Arts Festival- ADAF. "*About us*". Accessed November 3, 2021. https://ars.electronica.art/about/en/.

Cohen, D., Karkara, N. B., Stewart, D., Rees, N., & Coffman, J. (2010). Advocay Toolkit: A guide to influencing decisions that improve Children's lives. New York: United Nations Children's Fund (UNICEF).

Coromina, Júlia. "Learning and Teaching with Digital Technologies." CCCB LAB. CCCB Lab, February 7, 2019. https://lab.cccb.org/en/learning-and-teaching-with-digital-technologies/.

Dan, C. (2016, April 14). What is Digital Advocay? Opgehaald van muster: https://www.muster.com/blog/what-is-digital-advocacy

DevArt. "DevArt." Gray Area, March 3, 2014. https://grayarea.org/community-entry/devart/.

Digital Technology. (2021, March 27). Opgehaald van Dictionary of American History: https://www.encyclopedia.com/history/dictionaries-thesauruses-pictures-and-press-releases/digital-technology

FarOffa Festival. (sd). FarOffa. Accessed November 3, 2021: https://en.faroffa.com.br/novo

Folda History. (sd). Opgehaald van FOLDA: https://www.folda.ca/about-us/

Ienca, Marcelo, & Effy Vayena. *On the responsible use of digital data to tackle the COVID-19 pandemic*, 01 April 2020, Opgehaald van Nature Medicine: https://www.nature.com/articles/s41591-020-0832-5;#citeas.

Linders, Jan. "Can Digital Communication Be an Aesthetic Empowerment of the Audience?" Publications | European Theatre Convention, 2018. https://www.europeantheatre.eu/publication/can-digital-communication-be-an-aesthetic-empowerment-of-the-audience.

Mira Digital Arts Festival, ''MIRA'', accessed November 3, 2021, https://mirafestival.com/en/.

New Media and Digital Culture. (2021, April 12). Opgehaald van Encyclopedia of African-American Culture and History: https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/new-media-and-digital-culture

Playwave. (2018). How it works. Opgehaald van Playwave: https://playwave.com.au/pages/how-it-works

Principles for governing the internet. (2015). In R. H. Weber, Principles for governing the Internet: a comparative analysis (pp. 9-13). Unesco publishing. Opgehaald van https://unesdoc.unesco.org/in/documentViewer.xhtml?v=2.1.196&id=p::usmarcdef_0000234435&file=/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach_import_768cd191-5335-4331-82ed-0a726156dfd7%3F_%3D234435eng.pdf&locale=en&multi=true&ark=/ark:/48223/p

Stone, L. (2021, January 18). How Rich is the Data? A Loaded Look at Wealth Screening Tools for Nonprofits. Opgehaald van Sanmita: https://www.sanmita.com/how-rich-is-the-data-a-loaded-look-at-wealth-screening-tools-for-nonprofits/

Teach with digital technologies . (2019, September 25). Opgehaald van Victoria state government Education and Training: https://www.education.vic.gov.au/school/teachers/teachingresources/digital/Pages/teach.aspx

Ulvestad , Amund. "Making Art through Technology." European Theatre Lab, September 17, 2018. https://www.europeantheatrelab.eu/making-art-technology/.

United Nations ESCAP. Rep. *Technology and Inequalities* (Ch4 in Inequality in Asia and the Pacific in the era of the 2030 Agenda for Sustainable Development). United Nations ESCAP, May 2018. https://artnet.unescap.org/sti/publications/books-reports/technology-and-inequalities-ch4-inequality-asia-and-pacific-era-2030.

United Nations Children's Fund. "ADVOCACY TOOLKIT: A Guide to Influencing Decisions That Improve Children's Lives ." United Nations Children's Fund, 2016. https://www.right-to-education.org/resource/advocacy-toolkit-guide-influencing-decisions-improve-childrens-lives.