The Arts in a Digital World - Literature Review

Final Report

Table of Contents

Executive Summary

The arts and creative industries – along with banking, health care, and transport, even dining and shopping - all exist in an environment of digital dislocation, a digital world. The digital world for artists and arts organizations is more than technologies and platforms; it is new ways of working across the constraints of time and space, of removing pre-digital distinctions between creators and audiences, of developing immersive and engaging art forms. And, to be able to take full advantage of the potential of the digital world, artists and arts organizations need to be able to create and convert works, market and disseminate them, continuously innovate and operate creatively – supported by relevant and timely policies, legislation and programs. In fact, they need to adapt to and even recreate themselves to operate effectively in a digital world.

This report was prepared by Nordicity and commissioned by the Canada Council for the Arts. It explores the ways artists, arts organizations and arts funders from Canada and internationally have adapted to, and helped shape, the digital world. It considers the impact of digital technologies in the arts, and situates these developments in the context of the Council's strategic plan *Shaping a New Future 2016-2021* and the Council's digital ambitions. It then examines the digital strategies, and digital strategies in the arts, adopted by some leading jurisdictions in Canada and abroad. From these strategies emanate the programs and initiatives to support digital adoption in arts creation, innovation, dissemination, capacity building and social inclusion. These programs and initiatives are explored in a subsequent section of the report. Finally, the report discusses potential lessons and implications for the Council.

The report draws on an extensive literature review and interviews with arts and creative industry funders from around the world. It is complemented by a sister project (also by Nordicity) that surveys artists, arts professionals and arts organizations on their use of digital technologies and their digital capabilities. The report is a review of how agencies and funders have addressed the challenges of a digital world, but is not intended to be an exhaustive analysis of the transformation of the arts sector. The report considers strategy, policy, and administration that touches on both the arts and creative industries, but the focus is on strategies and programs for the arts - artists and arts organizations.

This report, along with the survey, should provide the Council with some useful material and models to consider in the implementation of its policies, programs, and processes. The report makes conclusions for consideration by the Council, but is not an implementation plan or roadmap. It is a review of other jurisdictions to provide material for the Council's own internal deliberations on how to help Canadian artists and arts organizations address the challenges and opportunities wrought by digital technology.

Digital transformation and disruption in society

A number of macro-trends are shaping society and the environment in which artists and arts organizations work. The term disruption was coined by Harvard Business School professor Clay Christensen to characterize the impact of new technologies that enabled firms to challenge the business models of the incumbent firms in the marketplace. The term has emerged as a way to describe the disruptive effect on traditional firms as a result of adopting new processes made possible by new technologies that are simpler, cheaper or more convenient than existing products and processes. Ultimately, disruption is the result of the harnessing of technology to create new business models.[1] The following disruptions are affecting numerous sectors of the economy and society:

> "Social and technical changes are increasing the prominence of knowledge, creativity, culture and the arts in the economy, whilst digital and other technologies lift constraints of distance and time on participation in the arts.
>
> - Hasan Bakhshi, Radhika Desai and Alan Freeman, Not Rocket Science: A Roadmap for Arts and Cultural R&D, 2010.

- **The proliferation of mobile devices** has reinforced the movement toward content and communications that are available anytime and anywhere. A corollary to the movement toward increased content use on mobile is the proliferation of apps, platforms and operating systems that shape how users communicate and interact with content. Content creators must devise their content accordingly.

- **The transformation of public engagement**, where formerly passive content "consumers" have become active co-creators of, and participants in, digital content and the environments in which the content is consumed. As well, social media have become the platform of engagement, an environment that transforms the ways in which the artist and arts organizations engage with their publics.

- **The sharing economy and disintermediation** are disrupting the traditional business models of the tourism, transportation and other sectors; and the traditional distinctions between contractors vs. employees; and casual workers vs. part- or full-time employees.

- **Big data, enabled by massive growth in processing capacity** and the development and deployment of measurement technologies. Data, once captured, stored, analyzed and presented, have value, and digital analytics are transforming the way businesses manage their human and material resources, understand their customers, and develop new strategies and ventures.

---

[1] https://techcrunch.com/2013/02/16/the-truth-about-disruption/

- **The uneven distribution of digital infrastructure and access** across the population, where urban, educated, higher-income "haves" can engage more fully with the digital world than rural, less-educated, lower-income "have-nots."

The study notes the impact of these trends on some selected industries, namely financial services, health care, transportation and entertainment/media. There are leaders and laggards, opportunities and threats, across the economy and society, and the arts sector is not alone in grappling with the implications of digital technologies. At the same time, there are a number of digital phenomena which affect the arts and creative industries sectors acutely, including:

- **Discoverability** – hundreds of hours of video uploaded to YouTube each minute; millions of would be musicians are uploading their music to similar platforms; thousands of books published each year in Canada alone, and ease of new software has enabled the mushrooming of self-publishing. Thus, creators face greater challenges in reaching audiences, or being discovered, in a crowded content world. They also face new gatekeepers, the main ones being international technology giants or international retailers, rather than the former local publisher, radio station, or TV network. Artists and arts organizations are indirectly affected by the lot of their creative industry brethren, and need to explore new ways of engaging with audiences, often by working with new types of intermediaries.

- **The evolving role of intermediaries, curators and programmers** – traditional intermediaries between artists and audiences include galleries, bookstores, performing arts venues, or film theatres. However, as audiences gain the ability to curate their own content, and seek content on multiple devices and platforms at times that are convenient, artists and arts organizations have had to respond to new intermediaries such as search engines, applications, video and audio streaming services, online booksellers or on-demand downloading options.

- **Multi-format and transmedia works** – creators in some disciplines are trying to appeal to both online and offline audiences, for example by publishing books in both ebook and print formats, or making videos that can be viewed in vertical and horizontal formats. This type of creation comes with costs, financially and in terms of infrastructure and skills

- **Social media** – as a means of engaging with audiences and as a means of disseminating content. Artists' and arts organizations' social media presence must be maintained and regularly updated. While this activity comes at a cost, digitally advanced creators can also benefit from social media to build awareness of their content and create communities of users and co-creators.

- **Diversified funding sources, such as crowdfunding** – to build their digital capacity, introduce necessary upgrades, undertake new digital projects or solidify their funding base, some artists and arts organizations are looking to digitally-enabled fundraising, or crowdfunding. The advantages: artists and arts organizations can build or expand on their audiences and user communities, and create excitement around their upcoming projects. The disadvantages: crowdfunding is generally (though not exclusively) for single projects or initiatives, making it difficult to sustain digital skills, capacity and knowledge over the long term.

- **Virtual and augmented reality** – from smartphone games to theatrical experiences, immersive simulations and computer-generated enhancements that interact with individuals and their surroundings are finding applications across artistic disciplines.

How artists and arts organizations are using digital technologies

At some level, digital technologies permeate the arts sector, be it through email and mobile communications, web sites and social media to build awareness, or software for organizational management. Beyond back office operations, many artists and arts organizations have harnessed digital technology to fundamentally transform the creative process and engage with audiences and co-creators as well as improve administrative processes. For example:

- **Digital as a means of creation**: Pioneering new media projects such as [Skawennati](#)'s online gallery/chat-space and mixed-reality event, *CyberPowWow* ; a paper doll/time-travel journal, *Imagining Indians in the 25th Century* ; and *TimeTraveller™*, a multi-platform project featuring nine machinima episodes;

- **Digital as rethinking distribution:** Increasing the visibility of Canadian independent film and video across multiple platforms, while developing new ways to access, curate, research and engage with film, video and exhibition works. VUCAVU combines the collections of eight media arts distributors across Canada with a catalogue spanning over 45 years of creation ranging from film and video works created at the inception of Canadian moving-image art to contemporary works;

- **Digital as an aid to operational effectiveness:** Streamlining back office operations, as with CultureJuice, an Edinburgh-based collaboration between four performing arts venues and a technology provider to create a website and mobile application for youth and young professionals to purchase discounted tickets to events at the four venues.

What are the barriers to other artists and arts organizations following this lead? Studies in the UK and US point to issues of digital literacy, funding, skills, technical infrastructure, and organizational strategy. The programs and initiatives in operation in a variety of jurisdictions described in this report have sought to address these issues.

Digital strategies

Numerous jurisdictions including Canada, the UK, France, Sweden, Australia, New Zealand, Singapore, the EU and others have published national digital strategies. These strategies generally take a broad view of digital technologies and their applications to health care, education, the innovation economy, and many other areas affected by digital. However, these strategies generally do not address the arts. If artistic content or the creative industries are considered at all, the discussion tends to be limited to digital preservation of material culture, intellectual property rights and potential for online engagement as part of public consultation processes.

Quebec and the *Fédération Wallonie-Bruxelles* have looked to digital culture plans (the former has already published its plan, the latter is currently developing its plan) to address digital creation, dissemination, and innovation in the arts and creative industries. To this end, the Government of Quebec, often through its cultural agencies and other partners, has launched over 50 initiatives targeting the arts, cultural industries, museums, and archives.

While digital cultural plans are rare, arts and culture funding organizations have incorporated digital considerations into their strategic visions and plans. There are two discernible approaches to these strategies. First, arts funders such as Arts Council England (ACE) and Creative Scotland take a "horizontal" approach to digital technologies: digital is a cross-cutting issue that affects all of their strategies and programs, and open funding programs have broken down the discipline-specific funding models previously employed. A more "vertical" approach has been taken by the *Conseil des arts et des*

lettres du Québec (CALQ) and by the creative industry development agencies, like the Ontario Media Development Corporation (OMDC). These organizations' strategic plans contain specific goals regarding digital, and specific funding streams to encourage digital adoption in their sectors. Generally speaking, both approaches address some key themes, namely:

- The use of digital technologies in the development and creation of new works;
- Supporting innovation in the arts/creative industries;
- Enabling greater access to, and dissemination of, creative works through digital technologies;
- Building the organizational capacity of arts/creative organizations, through digital technologies; and
- Strengthening social inclusion through digital.

These key themes are therefore the categories under which we describe arts and creative industry funding programs relating to digital.

Digital programs and initiatives of arts and creative industry funding organizations

Nordicity examined approximately 20 funding initiatives and programs from Canada, the UK, France, the Nordic Countries and the US to identify innovative or instructive approaches to bridging the arts and digital technologies (see Appendix 3 for a summary of international programs reviewed).

- With regard to the use of digital for **creation**, we reviewed Telefilm Canada's Micro-Budget Production Program, which supports projects from the development stage through to marketing and dissemination. Other programs explored include France's *Fonds SCAN*, which supports digital arts projects that bring together artists, researchers, and technicians; and ACE's Grants for the Arts, which are open and fund projects across disciplines and activities.

- With regard to **innovation and research and development** (R&D), we explored the New York State Council for the Arts and the Nordic Culture Fund, whose initiatives encourage creative risk-taking in interesting ways; the UK's Digital R&D Fund, which encouraged audience development and digital literacy in arts organizations; and Quebec's *Lab culturel*, which has documented lessons learned from a variety of small arts innovation projects.

- In terms of the use of digital technologies **for audience development and marketing**, we examined a strand of France's *Dispositif pour la création artistique numérique et multimédia* (DICRéAM), which supports the creation, exhibition and dissemination of digital art works; the OMDC's Interactive Digital Media Marketing Fund; the culture portal launched by Télé-Québec, *La Fabrique culturelle*; and the British Council's initiative to strengthen cultural relations with India through UK-India 2017 Digital.

- **Capacity building** is explored through arts metrics initiatives launched by ACE and DataArts (in the US). While ACE encourages National Portfolio Organizations to gather, share and make use of audience data, DataArts provides American arts organizations with financial and program-related data collected through a survey. UK's The Space is considered for its new role in providing advice and expertise to artists navigating digital spaces, while the Cultural Human Resources Council in Canada is supporting skills and knowledge development. Finally, the Australian Cultural Fund offers an interesting example of crowdfunding for the arts.

- The potential of digital technologies in the arts to promote **social inclusion** is considered for remote and indigenous communities (Quebec's *Scènes ouvertes*), and for youth (Creative Scotland's TTS.Digital). We also examine how the Micro-Budget Production Program supports official-language minority and Aboriginal creators.

Observations drawn from this review

Through the literature review and interviews, and our analysis of the above-mentioned programs, we arrived at a number of considerations for the Council as it explores its own digital strategy.

First, **digital literacy** came up as a barrier and an enabler for arts organizations and arts funders.[2] In the context of this study, digitally-literate arts organizations can be partners for other arts organizations, and thus enable a process of collective learning and skills development. Even where funding for digital technologies is available, however, arts organizations hampered by a lack of digital literacy have been unable to bring truly innovative projects forward. Addressing this lack of digital literacy requires highly-skilled arts funders to be involved in guiding funding applicants toward potential partners, platforms, and digital resources.

Second, the issues of **administrative flexibility and speed** on the part of the arts organization were recurrent. The challenge for arts program administrators is to devise policies and guidelines that are sufficiently open-ended to enable truly innovative projects to come forward, but are able to filter out projects that propose less innovative digital uses. Moreover, with the speed of technology changes and innovations comes a need for fund administrators to respond quickly to applications. However, in the early years of a program, it is equally important for fund administrators to take the time to explain their expectations and intentions for the program, and help guide applicants through the process.

Third, there have been many initiatives to support **innovation in the arts**, and many useful "lessons learned" that could be shared with the arts community and arts funders. These "lessons learned" can be captured in program evaluations, as well as in project evaluations that are made available to the wider arts community, and in workshops, seminars and online. These lessons can address project management, finding technology or research partners, finding digitally skilled staff, developing appropriate audience development strategies, or seeking funding.

Fourth, some arts funders or other public bodies have supported the development of **single, shared platforms for digital dissemination**, such as web portals. At the same time, though, these platforms need to be complementary to, and not duplicative of, well-established platforms such as YouTube, Vimeo or others.

Fifth, the **project-based nature of much arts funding** can pose c**hallenges** for arts organizations that are seeking to develop, expand or improve on their existing digital infrastructures. Funded

---

[2]Cornell University defines digital literacy as "the ability to find, evaluate, utilize, share, and create content using information technologies and the Internet." See http://www.teachthought.com/pedagogy/literacy/the-definition-of-digital-literacy/. For this study, the notion of digital literacy is more advanced: we assume that arts organizations and funders are able to use digital technologies, but not necessarily at the level required to create digital art works, implement packaged software solutions for operational functions like customer relationship management (CRM), undertake digital marketing campaigns, or harness the full potential of social media to create communities of engaged users and co-creators.

organizations can use some of the funding from their creative projects to acquire equipment or technology that is related to the project, but it is difficult for these organizations to build a coherent, consistent digital capacity across many such projects. Arts organizations with a solid digital strategy for their organization, with staged goals, consistent platforms and software, and an awareness of necessary skills, seem to manage better across their projects.

Sixth, some funders note that the benefits of creating more **inclusive programs** can be considerable, for the arts community and funders. Excluded or marginalized communities, when offered the resources to use digital technologies creatively, can bring new perspectives on the creative process and audiences. These communities need, however, to be involved collaboratively in the design and delivery of the programs that support them.

Seventh, **measures of the effectiveness** of these programs and initiatives are relatively **rare**. Often, this lack of measurement is because many digital funding programs in the arts world are fairly new and have not supported a critical mass of projects to be evaluated. Funders generally do require post-project reporting from the arts organization; however, given the diversity of funded projects (particularly those involving innovative or avant-garde approaches), it is difficult to be able to aggregate the results of all of these projects into a single evaluation report. "Output" measures are easier to compile, since they relate to the allocation of funding across projects by language, region, discipline etc. "Outcome" measures, relating to the overall impact of funded projects, if gathered at all, tend to focus on audiences (e.g. number of event attendees, types of populations reached online, ticket sales, etc.). More investment by program administrators in measurement is likely, to allow them to avail themselves of innovative performance measurement tools (e.g. qualitative measures) to assess these programs.

Finally, artists and arts organizations actively engaged in digital technologies are demonstrating the transformative potential of these technologies at the creative, audience, and operational levels, keeping pace with the digital transformations that society and the economy are experiencing. Generally, arts funders have responded, albeit in a more measured, incremental way, layering digital policies and funding programs onto existing funding approaches.

Alternative models

These observations lead us to posit some strategies and models for consideration by the Council. These models are not mutually exclusive, but do focus on different elements of the themes of creation, innovation, dissemination, capacity building and social inclusion.

A first model focuses on creation. The strategy would be to encourage the use of digital technologies to create a critical mass of high-quality digital art works, and digitally-enabled art. The objective would be to build arts organizations' confidence and comfort with using digital technologies to create works or convert existing works into digital formats. There would be some emphasis as well on **audience engagement**, such that arts organizations could experiment with creating interactive or participatory works, or develop opportunities for collaborative creation. Funding programs could therefore stress innovation and experimentation, with initially low expectations of audience or commercial success. Once a critical mass is achieved and digital literacy among arts organizations and funders increases, the emphasis could shift to dissemination/exhibition, audience development, capacity building or other areas.

A second model stresses capacity building. The strategy would be to build digital skills, expand the use of digital technologies for marketing, increase audience access to works digitally, and encourage arts organizations to work collaboratively. Funding programs could therefore support projects that

provide training in digital creation, marketing, management and audience development. They could also support the creation of shared services for arts organizations (e.g. online ticketing, portals for exhibition of art works, or real-time collection of audience data).

A third model emphasizes transformation. The strategy would be to use digital technologies to transform the ways arts organizations create, engage with audiences, and manage their processes. Funded projects could explore new methods of relating to audiences in immersive or co-creative spaces, and engaging with younger and more diverse audiences. Arts organizations could be encouraged to implement new business models, such as partnerships with the commercial creative industry or technology companies, to share platforms, build skills, and leverage the creative vision of artists to inspire new applications of technology beyond the arts. And projects could encourage arts organization re-engineering, through new forms of teamwork and collaboration across time and space.

Whatever the model or strategy adopted, we are reminded of the message that many of our interviewees expressed: digital technology is a means, and not an end. The ends, for arts funders and arts organizations, are evergreen: artistic excellence, audience engagement, inclusion, resilience, innovation. Digital technologies are one means – albeit a pervasive and transformative means – of achieving those ends.

1. Introduction

Nordicity was commissioned by the Canada Council for the Arts ("Council") to undertake the research, analysis and development of conclusions in the preparation of this report. In this section we outline the organization of the report, state the objectives of the mandate, discuss the context in which the study has been undertaken, and summarize the methodology used in the research and analysis.

1.1. Organization of this report

The main themes of this report are organized as follows:

Section 2. Context – State of Digital in the World and the Arts: provides an overview of the disruptive impact of digital technology across various sectors and specific examples of how digital has been incorporated into the arts, both in Canada and internationally.

Section 3. Policy Underpinnings to a Digital Focus: reviews national digital strategies of a number of jurisdictions, with a particular emphasis on how the arts and creative industries are accounted for as part of strategic goals. The section also summarizes digital cultural strategies and plans of leading international arts funders.

Section 4: Strategies, Programs and Initiatives Supporting Digital Adoption: description and categorization of programs and initiatives that illustrate novel approaches to the integration of arts and digital technology and draw on insights from a broad geographical area.

Section 5. Practices Precedents, and Conclusions: considers lessons learned from the review of strategies and programs as well as interviews with cultural leaders and decision-makers. The section revisits the distinction between digital art forms and digitally-enabled artworks in order to highlight alternate models and measures of effectiveness that can inform future work by the Council.

In addition to the content contained in the body of the report, the **appendices** provide:

- a list of people interviewed throughout the research process;

- an annotated bibliography of strategies dealing with digital technology and the arts from five international jurisdictions;

- summaries of programs to support digital technology in the arts and notes from interviews with Canadian and international professionals active at the intersection of arts and digital technology.

1.2. Objectives, purpose and scope

The objective of the study as worded by the Canada Council was to review "multiple digital strategies, funds and plans for the arts [that] have been put in place in Canada and around the world by governments and governmental agencies." [3]

---

[3] As stated by the Canada Council regarding this project.

The purpose of this study was to provide the Canada Council with a reference point at this stage in its evolution with respect to initiatives it may or may not take to enable its grantee organizations to address challenges and adopt new ways of creating and delivering the arts.

The scope of this review encompasses how other jurisdictions address the impact of digital technologies as a "through-line chain," from policy rationale, to strategy, to program, to evaluation of results, at least where the information was available. While not an evaluation of individual programs, the report does provide a broader evaluation of the state of the arts funding ecosystem.

1.3. Context within the Canada Council

High levels of online engagement are transforming many aspects of Canadian society, including the ways that Canadians produce and consume arts and culture-related activities. As it recognized in the Request for Proposals (RFP) for this project, the Canada Council must "seriously consider its role in ensuring the arts sector is positioned to take advantage of all the opportunities presented by digital technologies, and also to respond to the needs and challenges posed by this environment."

In 2011 the Canadian Public Arts Funders (CPAF) commissioned *Digital Transitions and the Impact of New Technology on the Arts,* a report that concluded broadly that the Council and arts organizations were not fully engaged in the development of digital capacity.[4] That report was the first attempt at addressing the challenges of arts in a digital world, in the Canadian arts community. Five years later, this Arts in a Digital World report is not exactly a sequel in that there is no evaluation of the needs or uses, but it does document how other jurisdictions have addressed these issues.

There has been no systematic tracking of the adoption of digital technologies among Canadian arts organizations since that time. Hence, it is not clear to what degree arts organizations have adopted digital technologies in support of the creation, dissemination, or management of their operations. There has been no needs assessment per se as a precursor to this study. However, the Council recognized that it would be timely to canvass other arts funding organizations, and learn how they had addressed or are addressing the phenomenon of digital disruption as it affects arts organizations. To that end, the Council commissioned a companion survey of artists and arts organizations.[5]

In 2016, the Canada Council released its 2016-2021 Strategic Plan, *Shaping a New Future*. The plan is structured around four key commitments, one of which relates to digital transformation. Specifically, the Council commits to: "amplify the quality, scale and sharing of Canadian art through digital technology." In meeting this commitment, the Council will develop and implement its first digital strategy. This strategy will guide its additional targeted spending to support the professional arts sector to effectively use digital technologies to create and share its work with audiences here and around the world. The strategy will complement the strategies of the government and other cultural industries and the media.

---

[4] That 2011 report makes a distinction between art forms that exist because of technology (e.g. digital video) and art forms that are influenced by technology. The report focuses on the second type of art and demonstrates that interest in technology has grown across disciplines in response to new possibilities for digital distribution and audience engagement:
http://www.cpaf-opsac.org/en/themes/documents/DigitalTransitionsReport-FINAL-EN.pdf

[5] See the Council's Arts in a Digital World Survey, also undertaken by Nordicity:
http://fluidsurveys.com/s/ArtsinaDigitalWorld/?TEST_DATA=&_cb=bsudiVGC8p

As part of the development of this strategy, the Council wanted to learn from other similar organizations, or even different kinds of organizations facing similar problems. Were there strategies and structures that could inform the design of the Council's own approaches for encouraging digital transformation among its constituencies? The Council's main focus is to support professional artists and arts organizations through grants and services in a number of different artistic disciplines.

For this study, the Council defined three categories of digital activities and their relevance, as follows:

- **Tool in creation of art:** Use of digital technologies as an artist practice or as a creation tool – how do other funding organizations directly encourage those artists and arts organizations interested in using technology.

- **Dissemination and engagement tool:** Use of digital technologies and platforms, including social media, that enable the arts sector to develop audiences and interact with them. Such tools can also enable individual artists and arts organizations to more effectively disseminate their work.

- **Business tool:** Use of information and communications technology (ICT) platforms by arts organizations increase the effectiveness of their organization's business practices – from HR, to back-office, to financing, to sales and marketing. Again, these tools can be available for individual artists involved in marketing/promoting and selling their work.

Taken together, these three categories of digital activities offer a range of approaches to meeting the Council's commitment to expand the creation and dissemination of art through digital technology as outlined in the Strategic Plan. During the course of this project, we have found that it is not easy to separate the second and third categories, e.g. organizations can use business tools to for connecting to the public, which are in effect dissemination and engagement tools. In this report we do not treat these categories as mutually exclusive.

1.4. Relevance of this project to the Canada Council's Initiatives

There are two more important contextual comments as a preamble to this report.

First, the Council is preparing its own organizational digital strategy, that is, how best to use technology and other tools to improve its service to the Canadian arts community and its productivity in the delivery of its programs. This study does not address the internal digital strategy of the Council.

Second, since launching this Arts in a Digital World initiative the Council has published its strategic plan. Here, the Council notes that in the digital world, the lines are blurred between artists and audiences, and between "professional" and "amateur" creators. Whether or not these creators are making digital art, the Council highlights the potential of digital technologies to transform the creative process, strengthen the connection between creators and audiences, and enable the development of new business models for arts organizations. In this light, the Council plans to expand the knowledge base and awareness of digital opportunities among artists, and invest in digital initiatives that lead to the development of new art forms and new audience experiences.

Thus, the aim of this report is to provide the Council with some useful material and models to consider in the implementation of its policies, programs, and processes. Many examples are provided from Canada and abroad, and the report makes some broad observations about the successes and challenges faced by arts funding organizations in enabling digital transitions in the arts. While the report makes observations for consideration, however, this report is not an implementation plan or

roadmap. It is designed as a review of other jurisdictions to support the Council's own deliberations on how to help Canadian arts organizations address the challenges and opportunities wrought by digital technology.

1.5. Approach, methodology and boundaries

The study approach was primarily through a literature review and interviews of arts funding organizations in Canadian and foreign jurisdictions. Besides the more traditional organizations from Commonwealth and other roughly similar western countries, efforts were made to access less well known countries exhibiting interesting digital initiatives or practices. However, readers will note that most of the useful references are from the more traditional western democracies of the English and French speaking world.

The analytical framework for review of other jurisdictions' programs and initiatives was a systematic question set, namely the following:

- What do they do – what is the eligibility of the program's recipients and what activities are eligible?
- What's the area of focus – performing arts, visual arts, etc.?
- Why did they do it – what is the program's rationale?
- How did they do it – what were the consultation, design, and implementation processes?
- What was the impact – what were the goals achieved, impact on the arts, impact on digital preparedness?
- What is the relevance to the aims of the Council?

The report is focused on the arts, but it does make use of the experience of different jurisdictions in support of the creative and cultural industries – like film/TV production, music production and distribution, interactive digital media and games, and print (books and magazines).

2. Context – the State of Digital in Society and the Arts

This section considers some of the manifestations of digital technologies as agents of change – disruption, certainly, but also opportunities. We examine some of these manifestations, through mobile technologies, changing user and audience behaviour, the growing use of data analytics, and the meaning of digital access for disenfranchised communities. We use examples from financial services, healthcare, academia, transportation, and media and entertainment to illustrate how digital is transforming society and the economy at large. Finally, we explore the arts sector specifically, and the impact of digital technologies on artists and arts organizations.

Arts in a digital world is an apt descriptor for this project. It is not about technology. It is about arts practice and engagement in a society that has entered an age where digital technology has affected life profoundly. As individuals the way we work and play, the way we communicate and do tasks and undertake activities – all are affected by, and some would submit, profoundly affected by the application of digital technology.

These changes run right through all organized activity in the modern world, from academia to government to industry, and, yes, to the non-profit world of the arts. Banking, shopping, travelling,

eating, and whatever else have all been subject to the inexorable impact of Moore's law on every aspect of life.[6] The creative industries have been disrupted radically by this digital world, and the arts have not been impervious to a similar dislocation.

The artist as creator has always sought to try new things and create new works with new tools. Therefore, fostering the work of the individual artist to take advantage of the new digital tools is part of creation and artistic development. So is supporting arts organizations to enable artists to work collaboratively in creation, production, dissemination, attracting financial support, and engaging audiences. As audience behaviour is changed by new competition enabled by digital platforms - as well as social media and the like - arts organizations must adapt and even transform themselves to succeed in a digital world.

2.1. Widespread impact of digital in society

The societal transformations that emanate from digital technologies – and which in turn shape the direction of technology development – are extensive. Whether we consider the proliferation of devices and uses (apps and platforms), the evolution from audiences as users to creators, the sharing economy, big data – these are but some of the manifestations of digital transformation explored below.

Mobile technologies and platforms are an ever-growing means of communicating, disseminating and accessing content. Over 24 million subscribers to mobile services in Canada, of whom more than 80% use smartphones to play games, watch video, chat and message, use social media and shop - and many (over a third) are multi-tasking, such as viewing television while using their mobile devices.[7] Users spend as much time on mobile platforms (tablets and mobile phones) as on desktop platforms, and the usage of mobile connectivity is growing three times as fast as fixed Internet connections.[8] While mobile is increasingly a content delivery vehicle rather than strictly a communications vehicle, its main impact is the creation of a mobile world which transforms in turn the behaviour of people.

Related to the growth in mobile is the **proliferation of apps and platforms**, many intended to facilitate mobile communications and content delivery.[9] In a sense, the digital world comprises a number of smaller worlds, each running on a different app or platform such as websites, Twitter, Facebook, Instagram, SnapChat, games apps, painting apps, photo apps, music apps, running on Android, IOS, Windows, or a variety of operating systems. Few users are familiar with all of these tools, but content owners and creators need to be able to anticipate and adapt to the growing prevalence of these mobile platforms.

---

[6] Gordon Moore, found of Intel, observed that technological advances mean that the computing capacity of microchips doubles in speed and capacity approximately every two years.

[8] Comscore, *Digital Future in Focus: Canada 2015*, pp. 19-20.

[9] In this report, "apps" refer to software programs (applications) that are intended for very specific mobile or web uses, with some of the functionalities of social media or websites. For example, the National Gallery of Canada has a mobile app that allows users to browse the Gallery's Canadian collection and related information, at http://www.gallery.ca/mobileapp/. "Platforms" are fully functional websites with a variety of content storage, exhibition and/or delivery functionalities, along with communications tools (e.g. email contact, Twitter accounts, etc.). Social media such as Facebook or Twitter are, for the purposes of this paper, a type of platform.

Aided by mobile, content users are no longer passive audiences, but are more and more active participants in digital content. For example, where once users could only read web content posted by webmasters, collaborative creation through wikis means users can add to web content created by others. Indeed, **collaborative creation** can be as sophisticated in the arts as the [World Online Orchestra](#), where users can upload their own musical performances and create virtual musical ensembles.

This increased access to people through the web illustrates the related phenomenon of the **blurring of professional and amateur** status in the digital world. Amateur videographers, for example, can upload video that is incorporated into professional news reports, while YouTube users can access professionally-produced or amateur video with similar ease. In addition, **public curation** has emerged as an alternative to scheduled or professionally curated content.

- Users can create their own playlists of music or create video "favourites", thus playing the curation role that radio stations and television broadcasters have traditionally played.

- Visual arts lovers can build their own virtual wall of gallery art, rather than relying on visits to professionally curated art exhibits in bricks-and-mortar exhibition spaces.

- Users are taking on the "vetting" role that professional **critics** have traditionally played; "comments" sections of websites, tweets, "likes" on Facebook and other tools allow users to give feedback directly to creators and other users, and promote their favourite content through "sharing" functions.

The success of digital content is less related to clicks on websites, or unique visits, than to audience retention. Advertisers, marketers, and content creators all recognize that users do not retain content that they have browsed through in a several-second click-through. Content that retains audiences has more impact, more potential to achieve the artist's goals and, in a commercial world, more potential to generate advertising and/or subscription revenue. Leading digital creators are developing immersive, engaging, even virtual, worlds, where users have a real-time experience interacting with content. Rather than watching a video, users can create their own beings (avatars) in [Second Life](#). Rather than visiting a gallery to see an art work, visitors to the *Maison des arts Enghiens-Les-Bains* could don a virtual reality helmet, manipulate a digital video camera, and create their own experience of levitating in David Guez' [Lévitation](#).

Many aspects of collaborative consumption – where owners of items that are not used to their full potential are made available to other users – are facilitated by digital technologies. This "**sharing economy"** brings homeowners in contact with tourists, through Airbnb. It brings drivers to passengers through Uber (discussed further below). Digital technology makes listings available online or through apps, allows users to make reservations and payments, enables both providers and users to review each other, all through a distributed and decentralized network. Hotel owners, car rental firms, and taxi companies are all experiencing digital challenges to their business models. The labour force, and the nature of paid and contract labour, are shifting: people working in the sharing economy straddle the status of being employees and self-employed, and between working on a part-time and a casual basis. Artists and arts organizations are familiar with a different style of collaborative consumption, for example through shared studios or arts hubs, and collaborative models lend themselves to the sharing of digital infrastructures and equipment.

Another digital phenomenon is **"big data"**, the capacity to gather, store, analyze and commercialize massive amounts of information about users and their use of content and platforms, but also information about transportation (e.g. on-time performance of public transit vehicles), medicine (symptom checkers on Google), human resources, etc. Data, once compiled and analyzed, are a

marketable commodity, and have significant value to generate insights that drive business decisions – as Google, Netflix, Amazon and other giants of the digital economy have shown. In the arts and culture, big data relates to the increasing volume of information that can be gathered from social media, websites, ticket and unit sales, surveys, and so on. Used effectively, big data can allow music groups, for example, to know if their audience members are interested in other artists (and which artists they are following), how often and by which users their songs are played from playlists, where to tour, and many other aspects of their audiences.

Access to big data alone is not meaningful, as it needs to be interpreted sensibly in order to take some appropriate action as a result of the information. Thus, **data analytics** represent an important offshoot of big data – for arts organizations and artists who need to use big data in many of their decisions on selections of works to perform or exhibit, or for getting to know and serve their audiences better. Data analytics, when used for financial, human resource or operational applications, also has the potential to strengthen operations as well as making strategic decisions.

2.1.1. Access equality

The challenges and opportunities of digital technologies are not, however, experienced equally. Not all communities or populations have equal access to the means of creating, using, interacting, learning or seeing themselves portrayed, via digital technologies. For example, in the developing world, mobile broadband penetration is one-third of that in developed countries[10]. In Canada, rural communities' broadband services generally operate at much lower download speeds than in urban centres, thus limiting the types of content that rural users can access[11].

The CRTC has recently examined whether new measures are required to encourage lower-income Canadians to access broadband Internet. And non-urban indigenous people face challenges in accessing broadband, obtaining affordable broadband, and acquiring the skills and bridging the digital divide. People with visual or mobility impairments cannot easily access web content that is increasingly video-based, interactive and application-rich, and which might not be designed for computability with screen readers or speech-to-text programs. A key thrust of Canada's national digital strategy of 2010 was, therefore, to ensure equitable access to broadband for these less-connected populations.

2.2. Digital as the disrupter and platform for new opportunities

Digital technology has been a disruptive force in most sectors of economic activity. Business models have been torn asunder and replaced by those who could harness the power of digital technology – but for many sectors the new models have not yet generated the same level of revenue as the traditional models. For example:

- In **financial services**, established financial institutions are struggling to diffuse innovation throughout large, multinational organizations while startups are trying to navigate regulations

---

[10] Octavio Kulesz, "Challenges of the Digital Age" in UNESCO, *Re-Shaping Cultural Policies: A Decade of Promoting the Diversity of Cultural Expressions for Development* (Paris: UNESCO, 2015), p. 78.

[11] CRTC, *Communications Monitoring Report 2015*, figure 5.3.17. See http://www.crtc.gc.ca/eng/publications/reports/policymonitoring/2015/cmr5.htm#f5317. It is a moving target, of course, as we enter the world of "5G" wireless networks in another 5 years where data capacity will mushroom in the areas where such data infrastructure is installed.

that predate the digital era. The advent of "block chain" technology[12] could further disrupt both groups by radically reducing the cost of financial transactions.[13] Apple Pay's entry into Canadian markets typifies the potential encroachment of the big technology companies on what was formerly the banks' customer base.[14]

- In **healthcare**, online platforms are changing the way that people access information about both prevention and treatment as well as how they interact with healthcare providers. In this case the disruption can lead to positive outcomes as new tools emerge to facilitate access to the right health care. For example, Iamsick.ca is a healthcare service app that allows people to search for family doctors, walk-in clinics and pharmacists, filtered by location, hours of operation and languages of services. Most recently, the Iamsick team translated the app into Arabic and also set up an Arabic phone line to assist Syrian refugees in Canada.

- In **academia**, online lectures and interactive learning tools are transforming students' expectations and the way that educators organize courses, design assignments and communicate inside and outside the classroom. Moreover, digital technology has opened up new fields of inquiry and means of online collaboration, and encouraged the development of new research methods by academic researchers working in a variety of disciplines. Some of these innovative Canadian academics are featured in call out boxes throughout this report.

- In **transportation**, the rise of smartphone apps has allowed services such as Uber and counterparts in other countries,[15] to compete with the traditional taxi industry. Uber launched in 2012 and now operates in more than 300 cities in 60 countries. Taxi drivers as well as public sector regulators across Canada are struggling with how handle an influx of flexible, self-directed drivers into the market, which has dramatically driven down the value of taxi medallions for their owners. The next generation of digital transformation in automobiles is likely to include autonomous vehicles – automobiles without drivers, that are dispatched and guided using digital technologies.

- In the **media and entertainment** industry, the value of intellectual property has been undermined by easy digital access at a price point that is much lower than when embedded in a physical product like vinyl, paper, or DVD. Consumers have become accustomed to Internet content as being free. Advertising, which has paid the bills for television programming, magazines, and newspapers, has been migrating to digital platforms which do not depend on content for attracting the user.[16] Subscription-based content services, while they can generate subscription revenue (sometimes along with advertising revenue, like Spotify), do not

---

[12] Block chain is an increasingly common digital tool that simplifies financial transactions by cutting out the middle man. Block chain was first employed by bitcoin but is now used by financial institutions, private firms and governments around the world. Essentially, electronic templates for contracts replace more cumbersome verification processes, which will facilitate e-commerce enormously.
http://blogs.wsj.com/cio/2016/02/02/cio-explainer-what-is-blockchain/

[13] https://www.thestar.com/business/2016/05/12/blockchain-technology-will-revolutionize-the-world-enthusiasts-say.html

[14] http://www.theglobeandmail.com/report-on-business/apple-pay-expands-in-canada-after-deal-with-big-banks/article29950489/

[15] e.g. Cabify in the Spanish-speaking world

[16] http://www.digitalmediaatthecrossroads.ca/pdfs/CanadianMediaDigitalUniverse.pdf?v=1.1

generate the kinds of payments to content creators that the sales of physical copies do. Protecting copyright and ensuring remuneration to creators is an ongoing challenge.

- Traditional content intermediaries such as broadcasters, movie theatres, and bookstores, are witnessing the transformation of their business models as users of content can self-curate, and acquire/stream/read content online or on mobile devices. And, although much is made of the "long tail" of content online, where a large number of very specialized communities access niche content, there is still a "hits"-based business online and, without discoverability, content is relegated to digital obscurity. In this context, the effectiveness of legislation and regulations to support and exhibit domestic content is increasingly called into question.

The arts world gets caught in two ways. First are issues of content creation and curation: the abundance of content, the complexity of platforms, and the pervasiveness of social media. Second, is the need to "re-engineer" arts organizations – at significant cost and effort - so they can continue to engage audiences, in the digital realm.

Artists Using Digital Technology in Research and Teaching

Joanna Berzowska is Assistant Professor of Design and Computation Arts at Concordia University and a member of the Hexagram Research Institute in Montreal. She is the founder and research director of XS Labs, a studio with a focus on innovation in the fields of electronic textiles and reactive garments.

Kedrick James is a spoken word and multimedia artist, network theorist, teacher and academic researcher. Based in Vancouver, his work applies concepts of procedural poetics and cultural recycling to words, sound and images.

2.2.1. Content creation and curation in the arts world

We now have the abundance of creative content now available on digital platforms, and the profound preoccupation with social media that offers previously unknown competition for the arts.[17] Key issues in this regard for the artist and the arts organization include:

- **Discoverability**, in a world where hundreds of hours of video are uploaded to YouTube every minute[18], where Canadian book publishers alone published over 6,000 Canadian titles each year[19], and where platforms like La Fabrique culturelle (for Quebec video and digital arts) or Évangéline (for Canadian song lyrics) need to compete with other aggregators to attract users to their vast libraries. Big tech companies have joined the media majors in bringing order to

---

[17] http://www.capacoa.ca/valueofpresentingdoc/ValueofPresenting_Final.pdf

[18] YouTube indicated in 2013 that over 100 hours of video were uploaded to its site every minute in 2013. More recent official statistics from YouTube are not available. See https://youtube.googleblog.com/2013/05/heres-to-eight-great-years.html. An oft-quoted statistic from US-based video insights firm Tubular Insights puts the figure at closer to 300 hours for 2014. See http://www.reelseo.com/youtube-300-hours/ .

[19] According to the most recently published evaluation of the Fund. See http://canada.pch.gc.ca/DAMAssetPub/DAM-PCH2-PCH-InstitutionalProfile/STAGING/texte-text/2014_Cultural_Industries_Cluster_Evaluation_1453817644458_eng.pdf.

the marketplace – for themselves, which puts the vast majority of content providers at a decided disadvantage in just getting known. In the meantime, traditional content windows such as bookstores and broadcasters are facing their own discoverability challenges.

- **Creating for multiple platforms** and in multiple formats. Independent Canadian book publishers cater to a market that is over 80% print sales, but where they need to anticipate ebook sales and potential emerging digital platforms, and publish books that are both print- and digital-compatible. Video artists shooting in vertical formats (for example, on mobile devices) need to reformat their videos to be viewed in the correct aspect ratio on horizontal screens (for example, laptop computers).

- **Transmedia** works which combine elements of, for example, print, music and video; or video and live performing arts, that cannot be easily categorized into discipline-specific funding models. Both artists and arts funders need to revisit their assumptions around traditional arts disciplines to accommodate the blurring of these lines.

- The changing role of **curators** or **exhibitors**, that in the pre-digital era could direct or dictate the user's experience of an art work (e.g. visiting an exhibition in a gallery, or compiling literary works into journals or anthologies). These content mediators must now anticipate multiple user experiences, dictated by users themselves, as with interactive or virtual reality art, to users' self-curated museum "walls", to theatre performances viewed online rather than live. Users are themselves doing the research and engaging with artistic and cultural meanings of artworks: bypassing traditional art history pathways they share and recommend content to like-minded communities and comment directly to artists rather than through curators and art dealers.

- Cross-cutting the challenges of multiple platforms, formats and user experiences are mobile technologies. Thanks to **mobile access and devices**, users expect content to be available anytime, anywhere, and expect to be able to reach creators, exhibitors, distributors, and other users virtually on demand.

- **Working collaboratively** with partners from outside the arts world. While arts co-operatives or artist-run centres are familiar models of collaborative working arrangements for artists, in the digital world artists are working with software developers, engineers, graphic designers, specialists in ergonomics or biosciences, entrepreneurs and experts who speak different creative languages and bring insights from different disciplines into the creation and dissemination of art.

2.2.2. Re-engineering the arts organization

It is expensive to re-engineer the organization, marketing, and dissemination of artworks and take advantage of digital platforms – and arts organizations do not have as much financial wherewithal to make the required investment in the tools to help them create, manage, and market their art. For example:

- To address the discoverability issue the challenge is to engage with audiences that are increasingly expecting to be able to comment on their experiences, communicate with creators and other users, and be involved in communities of like-minded users. To meet this challenge individual artists and arts organizations are building and maintaining their **social media** presence. Each social media platform – be it Twitter, Instagram, Facebook, YouTube, or others – serves a different audience, relies on different skills, and must be updated constantly. These platforms present opportunities for arts organizations to engage with

existing audiences and build relationships with new, younger ones, but at a cost in terms of time, skills and financing access to data.

- Acquiring, maintaining and upgrading **digital skills** is an ongoing challenge. Arts organizations that are in the early stages of digital adoption are focusing on acquiring web, social media and digital creation skills, while digital leaders need to maintain their skills and knowledge of emerging digital trends.

- The ongoing need to obtain and **diversify funding**, both to continue ongoing operations but also to make necessary digital investments, has led some arts organizations to the online world of crowdfunding. This challenge, too, requires investments of time and skills to do well, and remains only a partial solution to funding needs.

It is important recognize that digital technology can have both positive and negative effects on the arts. The effect can be highly positive since digital technology can be used for innovation in the creation process, as well as make art more accessible and customers more reachable. Yet, even though it can dramatically expand the reach of art, it tends to benefit the few at the top of the art and creative industry food chains. While there are certainly YouTube success stories of artists with millions of followers, creators do not necessarily benefit from the increased exposure and activity made possible by digital connectivity.[20] Moreover, very few of the millions of hopefuls who create art get discovered let alone access decent earnings.

Funders, too, are dealing with these disruptions. The report considers the impacts of digital technologies and trends on arts funders in section 2.4, below. The conclusion is that, whether good or bad, to remain relevant and continue to attract public support, the arts organizations need to adapt – or completely transform themselves - to attract audiences of all ages and diversity. They must face the challenges wrought by digital, and harness the technologies to improve their performance.

2.3. **Use of technology in the arts**

The use of technology by artists and arts organizations runs the gamut from creation to dissemination to back-office administration, as noted above. In fact, there are many examples of the application of technology in the creative process that illustrate the range of ways of technology is employed in Canada, whether or not they are supported by the Canada Council or by other public funders. No judgment is made at this time whether these examples have been successful artistically or commercially, but they indicate the diversity of activity that is taking place. Specific examples are described in call-out boxes throughout this report. The majority of the examples focus on creation and dissemination however every effort was made to present both artists and arts organizations that represent both different geographic regions and diverse creators.

Interviews and reviews of strategic documents also revealed examples of the integration of digital technology in the arts outside of Canada. For instance, France's *Centre national du cinéma et de l'image animée* **(CNC)** has supported innovative, experimental digital art since 2002. Some recent projects include:

- The first scrolling digital graphic novel, "Phallaina," by artist Marietta Ren, which is available as an app through Google Play in a format designed for mobile screens;

---

[20] http://www.nytimes.com/2014/07/20/books/review/the-peoples-platform-by-astra-taylor.html?_r=0

- Compagnie Shonen's "School of Moon," which entailed a collaboration between dancer Éric Minh Cuong Castaing and robot technician Thomas Peyruse, puts professional dancers, children and robots on stage together to explore technology-mediated perceptions and representations of the human body.

Finding examples to illustrate the use of technology for dissemination and back-office application is somewhat more difficult. Certainly, the development of websites and services driven off of them are almost universal, at least to a basic level of sophistication. An example of an early leader in Canada is **Tafelmusik**, a baroque orchestra and chamber choir. In 2012 it launched a record label called Tafelmusik Media. In addition to selling CDs and DVDs internationally, its website also hosts a Watch & Listen page that allows fans to look behind the scenes at shows and tours in Toronto and around the world.

In the UK, Nesta's Digital R&D Fund for the Arts (2012-2015) has facilitated partnerships between arts organizations and technology companies and enabled innovation across multiple artistic disciplines. These projects are well documented and a few examples show where some of the forward thinking arts organizations are heading:

- In England, **Project Daedalus** brought together partners in the arts, technology and education sectors to explore the use of cameras mounted on automated drones in filmmaking. The partners developed an open source digital toolkit explaining the potential of drones to increase audience engagement.

- Four arts venues in Edinburgh worked with technology partner Tictoc to develop **Culture Juice**, a website that offers discounts and special offers for events in the city's Cultural Quarter. The website allows **Filmhouse, Royal Lyceum Theatre, Traverse Hall and Usher Hall** to share audiences and access a younger demographic.

Many arts organizations are using the most effective ticketing and marketing platforms they can afford to manage and assist in marketing and dissemination. Various arts granting programs (see below) aim at special projects, many of which involve the development of platforms to support these organizations. As mentioned above, a sister project sponsored by the Canada Council surveyed artists and arts organizations in Canada and the state of their technology usage, among other aspects of their operations. The "Arts in a Digital World" survey provided insight into the ways both individual artists and arts organizations across Canada use digital technology in all aspects of their work, from creation to administration and across various online platforms.[21]

While the current needs are still to be documented, it is clear that to be resilient and ultimately self-sustainable arts organizations will need to invest in some forms of supporting technology – and transform themselves to meet the challenges of the new digital world. Arts organizations that are digital leaders need to stay on top of the evolution of digital technologies and have the means to experiment and collaborate. To meet the challenges of today arts organizations must transform themselves to keep up their excellence, develop audiences, and engage with the public in dynamic new ways.

---

[21] http://canadacouncil.ca/council/blog/2016/05/digital-survey

2.4. Challenges for funding organizations

From the literature some basic challenges emerged in terms of what arts granting organizations are facing. It is useful to bear these challenges in mind when reviewing other jurisdictions.

One overriding issue is the broad orientation of arts funding organization and its positioning. There are different stances that can be taken, including the following:

- Whether there should be an explicit digital vision that would govern the relationships of the funder and its recipient arts institutions?

- Whether there should there be a funding strategy for which digital is one way to reach broader goals of excellence, appreciation, and participation?

- Whether there should there be a more transformative vision that recognizes that the digital world has changed the way in which people will relate to, participate in, or consume art.

Other more specific challenges to support arts organizations that engage with their constituencies in terms of the digital world would include the following:

- How to support both digital "leaders" and "laggards." While there are artists and arts organizations that are established users of digital technologies for creation, dissemination and organizational management, their needs from arts funders are very different from those of arts organizations that are less proficient or less equipped digitally;

- Whether adoption of new tools is heavily constrained in smaller arts organizations because of lack of human and financial resources;

- Whether some technology investments skew the organization toward unintended consequences, or at least away from their core competence or defined business strategy.

- Whether there are implementation difficulties because of lack of expertise in cross-sector knowledge or technology and arts knowledge.

Such issues and challenges are a large part of the research and analysis undertaken for this project. Ultimately, though, arts funding organizations operate in the same environment of disruptions and opportunities as the artists and arts organizations they support. Their strategies and programs inevitably must take these factors into account.

Digital Technology in Film and Video

VUCAVU is committed to increasing the visibility of Canadian independent film and video across multiple platforms, while developing new ways to access, curate, research and engage with film, video and exhibition works. VUCAVU combines the collections of eight media arts distributors across Canada with a catalogue spanning over 45 years of creation ranging from film and video works created at the inception of Canadian moving-image art to contemporary works.

The Film and Video Arts Society of Alberta (FAVA) supports the production, exhibition and distribution of film, video and media art in Northern Alberta: from celluloid to 4K, narrative to experimental to documentary and beyond. FAVA tracks, supports and links all of its services through an online application and is currently researching ways to share its work with other members of the Canadian independent media arts community.

3. Policy Underpinnings to a Digital Focus

This section reviews the national digital strategies of a number of jurisdictions, with a particular emphasis on the extent and ways in which the arts or creative industries figure among the priorities for these strategies. In addition, the section summarizes digital cultural strategies and plans of key arts organizations and jurisdictions.

3.1. National and multi-jurisdictional digital strategies

Nordicity explored the digital strategies of eight jurisdictions, chosen for their relatively high levels of broadband penetration, citizen access to/use of digital technologies, and their focus on broad applications of digital technologies for economic competitiveness, social cohesion, innovation, etc. at a level analogous to Canada's. The one multinational and seven national jurisdictions were: Australia, New Zealand, France, Estonia, Singapore, Sweden, Great Britain and the EU.[22]

3.1.1. The place of the arts and creative industries in digital strategies

Most of the jurisdictions reviewed have broad-ranging national digital strategies that address most or all of the following: accessibility of digital networks, the development of competitive businesses in the information and communication technologies (ICT) sector, e-government, skills development/training for a more digitally sophisticated population, telehealth, and other policy priorities. If the content or creative sector is addressed by these jurisdictions, the subjects covered include measures concerning rights management/copyright, digital preservation, and increasing citizens' access to public content repositories such as archives. Moreover, with one exception, the arts are not dealt with separately from the creative industries. A brief description for several countries is presented below in two categories - national digital strategies that include the arts or creative industries, and jurisdictions which focus on citizen engagement and social cohesion:

---

[22] More countries were researched for this report, but only these eight jurisdictions were selected for this digital strategy research component

National digital strategies that include the arts or creative industries:

New Zealand's [national digital strategy](#) of 2008 has three pillars or priority areas: the environment, the economy and "vibrant communities and culture." From this priority area the strategy enumerates actions relating to social inclusion, civic participation, and the creation and use of digital content, for which Creative New Zealand (New Zealand's arts funding body) has partial responsibility. There is, however, no link to Creative New Zealand programs and no incremental financial commitment for digital content supported by Creative New Zealand.

In the **UK**, the [national digital strategy](#) of 2009 does not address the arts per se, but it does address the creation of content from a more creative industries perspective. Key creative industries priorities including modernizing copyright and licensing regimes; creating digital test beds for content businesses; introducing mechanisms for digital video games, ebooks and commercial film; and terms of trade between broadcasters and new media producers.

Singapore's [national digital strategy](#) of 2005 focuses on the potential of ICTs to enable a competitive economy and a digitally capable workforce; there is no specific mention of the arts or creative industries. The strategy is accompanied by sector-specific digital strategies, including one for digital media and entertainment. The emphasis is on providing technology to enable digital media and entertainment firms to create and distribute content, and establishing Singapore as a hub for the international exchange of digital assets.

France's [national digital strategy](#) of 2012 is organized around five objectives, with a focus on the competitive position of France in the global economy. Although one of the objectives is to increase the quality and diversity of digital content produced and disseminated in France, the report does not address the arts explicitly or examine the relationship between creative expression and economic output.

Jurisdictions which focus on citizen engagement and social cohesion:

[Estonia, Sweden,](#) and the [EU](#) also have digital strategies. However, the content issues raised in these strategies emphasize digital technologies as a tool for citizen engagement and social cohesion. As such, the specific content issues include digitization of collections, making public archives accessible online, and digital preservation.

3.1.2. Conclusions regarding national digital strategies and the arts

These jurisdictional digital strategies seem somewhat dated, at least in terms of reflecting the impact of digital as we know it today. They focus on broad digital access, competitiveness, innovation, etc., but provide little guidance to a national arts granting agency like the Council.

We would conclude that digital content, and particularly arts content, is the next layer in national digital policies. Now that jurisdictions have devoted some effort and resources to analyzing the implications of digital technology for civic participation broadly, it may be the time for them to focus policies and programs on the issues surrounding content (its creation and co-creation, engagement and availability) in particular.

Digital technologies are transformative, as the digital strategies recognize and as we have illustrated earlier in this report. No longer is digital simply about using new tools; it is about changing the way in which we do things – and the way in which arts organizations and artists do things. We now address the next layer, from societal transformation and jurisdictional digital strategies to the initiatives taken at the arts administration level. We consider whether these initiatives promote significant transformation or measured adaptation to digital realities.

3.2. Emergence of the digital theme in arts strategies and policies

Specific digital strategies concerning the arts at a national or sub-national level were generally developed after the preparation of national digital strategies. We believe they provide more relevant insights for the Council, and are reviewed in this section.[23]

Two jurisdictions which singled out digital technologies specifically are Quebec and Belgium, and they provide examples of the approach to focus directly on digital. We then review the place of digital technologies in the strategic planning of several other jurisdictions. Finally, this section summarizes the developments in four different jurisdictions – Quebec, Ontario, Scotland, and the UK – focusing on four granting/financing organizations. They were selected as all having interesting and relevant experience for the Canada Council.

3.2.1. Digital plans in Quebec and Belgium

The two jurisdictions which have an explicit digital cultural plan are Quebec and the *Fédération Wallonie-Bruxelles* in Belgium. [24]

Quebec launched its digital culture planning process in 2010, with an extensive consultation of arts and culture sector players, coordinated by the *Conseil des arts et des lettres du Québec* (**CALQ**) and the *Société de développement des entreprises culturelles* (**SODEC**). The consultations and related briefs led to the development of the province's digital cultural strategy, published in early 2014.

The digital strategy was spelled out in detail as a seven-year digital cultural plan. It was released later in 2014 with the announcement of the provincial budget. The nine objectives were compressed into three broad areas of intervention:

- Creation of digital cultural content;
- Innovation to adapt to digital culture; and,
- Dissemination of digital cultural content in order to ensure its accessibility.

Over 50 initiatives have been launched, coordinated by the *Ministère de la culture et des communications du Québec* (MCCQ) and undertaken by various public agencies and funded organizations.

The *Fédération Wallonie-Bruxelles* in Belgium is developing a digital cultural plan based on the Quebec model, which is currently in the consultation phase. In both Quebec and the *Fédération Wallonie-Bruxelles*, a government department is responsible for the design and coordination of the strategy or plan, but numerous organizations are (or will be) responsible for its implementation. The proliferation of new initiatives and the adaptation of existing programs and initiatives to take into account digital realities led Quebec to centralize coordination, information, monitoring and evaluation of the initiatives. Belgian cultural organizations have advocated for a digital culture portal and

---

[23] Interestingly, the Canada Council for the Arts is not alone in considering the current juncture as appropriate to develop a digital strategy. Singapore's National Arts Council is in the very early stages of research to develop a digital arts strategy for Singapore.

[24] Australia has a national digital content plan that references cultural content, though not the arts per se. See Government of Australia, *Creative Industries: a Strategy for 21st Century Australia*, August 2011.

centralized ticket platform or *guichet unique*, while Quebec has an extensive website with details of each of the plan's 50-plus initiatives.

In Quebec, the MCCQ is taking a phased approach with regard to the implementation of the digital cultural plan, particularly for the arts sector. The first years of the plan have emphasized the creation of digital cultural content, with new funding programs administered by CALQ to this effect. In the current (third) year, MCCQ's goal is to encourage more partnerships or mentoring (*accompagnement*) between larger and smaller arts organizations, the sharing of knowledge and digital "lessons learned," and an increased focus on access and discoverability. Since the earliest projects are only from 2014-15, there is as yet no evaluation available.

Digital Technology in Writing and Publishing

Revue bleuOrange is a Montreal-based magazine that publishes literary works that employ digital technologies as an integral part of the creative process. Pieces bring together text, sound, images, and videos as well as computer-generated text and interactive storytelling.

3.2.2. Arts and cultural industries funding organizations' digital strategies

With respect to the digital strategies of arts funding organizations, two general directions in approach are apparent:

- **Horizontal approaches: Digital woven into overall strategies -** strategies where digital media and technologies encompass all levels of the organization, in all its programs and activities (taking a horizontal approach to digital technologies, where digital is woven across programs)

- **Vertical approaches: Digital as a specific focus -** strategic plans that contain specific goals relating to digital technologies and platforms (taking a vertical approach to digital technologies, with discipline-specific funding and initiatives targeting digital projects)

Horizontal approaches:

- **ACE** is guided by a ten-year strategic plan (2010-2020) with five goals. The goals are broad and do not address digital specifically. Instead, ACE's digital strategy is captured in a *Creative Media Policy* (2013) whose goal is to support an increase in the quality, volume and reach of digital content and experiences from the arts and cultural sector for artistic, economic and audience development and growth.

- **Creative Scotland** in its 10-year strategic plan specified that digital is a connecting theme that cross-cuts all of the organization's goals. Officials examine whether and how funding recipients are implementing this connecting theme.

- **Creative New Zealand** has two general priorities (not expressed in its strategic plan, but in funding evaluation reports) for its funding programs across all art forms. One of these priorities is to support "projects or programmes of activity that involve the innovative and cost-effective use of digital technologies to create high-quality New Zealand work and/or engage and interact with audiences."

Where digital has been specified as an overarching theme (as with ACE and Creative Scotland) the organization's funding to arts organizations has been restructured to reflect this overarching theme.

Thus, arts organizations applying for funding are encouraged to demonstrate that digital technologies are part of their business plans and strategies. But at the same time, funding programs have broad parameters, and there is no funding stream that specifically supports digital technologies for these two agencies.

Vertical approaches:

- For **CALQ**, "digital" is a strategic plan objective, and there are specific funding streams to support greater use of digital technologies by arts organizations. In this sense, digital is compartmentalized as something apart from other programs with its own targeted programs. Digital arts are also a specific arts discipline, distinct from theatre, film, literature or other artistic disciplines, and as such, digital funding programs are administered by discipline-specific officers and assessed by discipline-specific juries. The funding organization's deep digital expertise is built up within this digital silo.

- Many of the creative industry sector development agencies continue to stick with vertical approaches, despite the integration of content on the web. For example, for **OMDC**, technology evolution and digital are key themes throughout the organization's 2015-16 business plan. Digital initiatives are supported in discipline-specific funding streams (e.g. books, magazines, music, film), but there is also a targeted goal relating to digital, as well as a specific funding stream for interactive digital media. While OMDC has created initiatives and new programs to bridge the individual creative sectors, it recognizes that industry sectors remain significantly different so largely operate within vertical sectors.

3.3. Summary of digital strategies in the arts

Arts funding organizations with strategies relating to the arts and digital technologies tend to revolve around five themes - three of which are parallel to the categorization of technology's impact on the arts as described in Section 1 (creation, dissemination and capacity building), and two new ones (innovation/R&D and social inclusion).

- The **creation** of new works and the adaptation of existing works to digital formats; encouraging creative excellence;

- **Access** via digital means to art works and art platforms; digital dissemination of art works; international exposure of artists and their works;

- Encouraging digital **innovation** and **R&D** in the arts;

- Building digital skills; enabling arts organizations to make greater or more effective use of digital technologies in marketing, promotion, audience development, and day-to-day operations (**capacity building**);

- Promoting **social inclusion** through the arts, and in particular enabling marginalized groups to benefit from digital technologies in the arts.

To summarize the distinctions this report makes in Section 3, the table below lists the goals (which may also be called "priorities" or "objectives," depending on the organization) of the key strategic and cultural plans reviewed above, e.g. ACE, Creative Scotland, CALQ and OMDC.

Where does the Canada Council fit in this analytical construct? The Council's new strategy and funding model appears to bridge these two approaches to some extent, considering digital both as an

overarching theme and identifying a specific objective for digital. Thus, as cited above, the Council commits to "amplify the quality, scale and sharing of Canadian art through digital technology" (one of the four goals or commitments of the strategic plan). This formulation may go a bit beyond Creative Scotland and the Arts Council of England – but is less direct than CALQ.

At the same time, the Council's new funding approach, with its six broad programs replacing numerous discipline-specific programs, allows for digital technologies and approaches to be integrated across all of the programs in a horizontal fashion. In this comparative construct, the Council appears to have both embraced flexibility, which is in part a reflection of the new digital environment, as well as the need to take advantage of the potential of digital.

As artists explore and expand their own ways to take advantage of digital technologies, they are embracing the opportunity to create new work in new ways: collaboratively, across distance and time (facilitated by their widespread access to high-speed broadband networks, software and hardware, and coding and data skills), with new creative partners (such as scientists, research, or software coders), and interactively (engaging users in co-creative experiences through virtual reality, open source coding, and diverse ways of sharing content). They are more closely involved in the dissemination of their work, be it through self-publishing, creating shared platforms for online access to their work, or devising highly interactive installations in exhibition spaces. As artistic practice evolves and is transformed, so, too, are the policies and programs that artists can access to support their practice.

4. Strategies, Programs and Initiatives Supporting Digital Adoption

In this section Nordicity describes digital programs and initiatives in a number of jurisdictions and arts and culture organizations. Following the framework created in section 3.2.3 above, these programs and initiatives are categorized by themes, namely: creation, innovation and R&D, dissemination and access, capacity building, and social inclusion.

These programs or initiatives were not selected as examples of best or exemplary practices, even though we report on evaluations where they are available. In addition, this study was not intended to provide an extensive profile of digital arts funding organizations domestically and internationally. Rather, the strategies, programs and initiatives were selected in order to provide a broad geographic perspective, to illustrate approaches that are novel or different from those used in the past by the Council, or to provide interesting insights into the arts and digital technologies. In Nordicity's experience, arts and research funding organizations in the UK have been particularly innovative in developing new funding models and initiatives in this area; as a result, there is a particular emphasis on UK programs in this section. Some 20 programs/initiatives studied are shown on table 1 below.

Table 1: Program and Initiatives Studied

Theme	Jurisdiction	Program (Organization)
Digital in Arts Creation	Canada (national)	Micro-Budget Production Program (Telefilm Canada)
	Canada (British Columbia)	Arts Innovation Fund (Creative BC) Special Programs (BC Arts Council)
	Canada (Quebec)	Mesure d'aide à la création et au développement de contenus culturels numériques originaux (CALQ)
	UK (Scotland)	Open Project Funding (Creative Scotland)
	France	Dispositif pour la création artistique multimédia et numérique (DICRéAM) (a program of the Centre national du

		cinéma et de l'image animée)
Innovation and R&D	Canada (Quebec)	Culture pour tous
	UK (national)	Digital R&D Fund (Nesta)
	US (state level)	New York State Council for the Arts
	Nordic Countries	Nordic Cultural Event of the Year: Digital 2015-2016 (Nordic Culture Fund)
Dissemination and Access	Canada (Quebec)	La Fabrique culturelle
	Canada (Ontario)	Interactive Digital Marketing Fund (OMDC)
	France	Dispositif pour la création artistique multimédia et numérique (DICRéAM) – aide à la diffusion (Centre national du cinéma et de l'image animée)
	UK (national)	UK-India 2017 (British Council)
Capacity Building	Canada (national)	Cultural Human Resources Council (CHRC) Various programs (Department of Canadian Heritage)
	Canada (Ontario)	Ontario Arts Council
	UK (England)	Funding for National Portfolio Organizations (Arts Council England), Regularly Funded Organizations (Creative Scotland), and Arts Council of Wales
	US	DataArts
	Australia	Australian Culture Fund - Creative Partnerships Australia
Social Inclusion	Canada (Quebec)	Scènes ouvertes (Société des arts technologiques)
	UK (Scotland)	Time to Shine Digital pilot project (Creative Scotland)
	Canada (national)	Micro-Budget Production Program (Telefilm Canada)

4.1. Digital in arts creation

Arts organizations receiving funding from public or private funders acknowledge that digital technologies open up exciting opportunities to create and collaborate across time and space, removing the limitations of face-to-face collaboration. Successful digital adopters have created more participatory, interactive works, blurring the lines between "artist" and "audience" and enabling audiences to experience art rather than passively "consume." At the same time, arts organizations face funding challenges to invest in new digital works or to convert existing works to digital formats.

To address these concerns and achieve their priorities with regard to digital content creation, numerous arts and creative industry funding organizations have funding programs for the development (research, prototyping, testing etc.) and production of digital works. For example, Quebec's *Conseil des arts et des lettres* supports the *Mesure d'aide à la création et au développement de contenus culturels numériques originaux* and Creative BC administers the Arts Innovation Fund and the Interactive Fund. France's *Dispositif d'aide pour la création artistique multimédia et numérique* (DICRéAM), created in 2002, supports innovative cross-disciplinary works at the development and creation stages, and provides funding for digital art exhibition. Additional examples are described below.

4.1.1. Examples of programs supporting creation

Various funders have taken slightly different approaches to the funding of digital content projects, whether by supporting projects through the development-production-dissemination cycle, encouraging partnerships, or eliminating distinctions among art forms or activities.

Nordicity explored the following programs and initiatives that support digital in arts creation:

- Telefilm`s Micro-Budget Production Program
- Le fonds de soutien à la creation artistique numérique in the Auvergne-Rhône-Alpes région of France
- Arts Council England's Grants for the Arts
- British Council`s approach to the creative economy

Each of these initiatives is discussed below.

Supporting projects from development to dissemination: Telefilm's micro-budget production program

This program supports feature films or narrative web-based projects as they go through the development, production, digital distribution and promotion stages. Created to support first films, or narrative web-based projects from first-time producers (though not digital art projects per se), the program provides relatively small grants (up to $112,500 for narrative web-based projects, compared to Telefilm's $700,000 average investment in a theatrical feature film production). In addition to the work of Telefilm and NFB in this space, the Canada Council also supports independent practice in film.

In an agreement with the National Film Board (NFB) web projects financed by Telefilm can be made available on the NFB's video streaming site (which can generate revenue for the project creator). In fact, it is a requirement that an applicant must fulfill, along with at least one other digital platform (often YouTube, though mobile, web or other digital platforms can be used)[25]. Interestingly, for this fund, Telefilm also has an arrangement with the international firm, Technicolor, which offers digital encoding services free of charge for funded projects.

Also unique to the micro-budget production program is the requirement that $7,500 of Telefilm's contribution to the project must be spent on a digital marketing expert and another 15% of the contribution must be used for promotion and distribution expenses. In this way, creation, production, marketing/promotion and distribution concerns are built into the project from its inception[26]. While Telefilm, the Canada Media Fund, and the NFB work with film, TV and digital producers in a business context, the Canada Council supports independent practice in film without that commercial orientation.

---

[25] Interestingly, the NFB website is both a vehicle to stream NFB-produced films and to increase exposure to projects supported by Telefilm's Micro-Budget Production Program.

[26] As a grant-based program, the Micro-Budget Production Program is similar to Canada Council funding programs, although the Council is not involved in the creative aspects of the project to the extent that Telefilm is with the Micro-Budget Production Program. Also, there is a more clearly commercial orientation in Telefilm's programs, which is less consistent with the independent creative practice supported by the Council.

Encouraging creative partnerships: Le fonds de soutien à la creation artistique numérique (SCAN)

This fund in the Auvergne-Rhône-Alpes region of France supports research, testing or creation of digital projects in any artistic medium (visual arts, video, literary, design, etc.) that are submitted by artists or organizations in the region. Funding takes the form of a grant of up to €25,000 (though averaging €8,000), and approximately 20-25 projects are supported annually.

SCAN Fund guidelines stipulate that one of the Fund's goals is to encourage a common language of practice among artists, technicians and engineers, and, as such, projects that bring together participants from each of these areas are preferred. Transmedia projects (bringing together multiple art forms, using digital technologies) are also preferred. The Fund administrator's mandate includes facilitating these partnerships: being aware of the region's research, arts, technology and commercial players; and structuring networks of academic institutions, technology developers, software companies, galleries and exhibition facilities, and artists.

Open project funding: Arts Council of England's Grants for the Arts

These grants are "open" in that they are not restricted to specific art forms; there are no separate streams for digital media or other art forms. Funding is also "open" in that it supports research, development, creation, dissemination, marketing, professional development, infrastructure, and other areas. A single project can receive funding for more than one type of activity (e.g. creation and marketing). The funding model is relatively new; therefore, it is too early to assess its success or measure results.

The point about open project funding is that it takes a different approach to funding creation, by not isolating creation to a specific funding stream. In fact, there are several other creation-oriented funds, e.g. at CNC, BC Arts Council, CALQ, Creative Scotland, and now the Canada Council. In that respect, artists and arts institutions can put forward projects that involve creation as well as other areas of development, dissemination, audience development, etc.

Artists Using Digital Technology in Creation

Electronic artist [Rafael Lozano Hemmer](#) develops interactive installations that are at the intersection of architecture and performance art. His main interest is in creating platforms for public participation, by altering technologies such as robotics, computerized surveillance or telematic networks. Inspired by phantasmagoria, carnival and animatronics, his light and shadow works are "antimonuments for alien agency."

Lorna Mill's *[Ways of Something](#)* (2015) is a four-part remake of John Berger's 1972 BBC documentary *Ways of Seeing* which questioned and critiqued modes of representation. Mills invited over 110 Canadian and International artists commonly working with 3D rendering, gifs, film remix, webcam performances, to contribute one- minute segments to her remake. The videos "question not only the relationship between Berger's text and the visuals shown, but also the role of technology, and the new status of computer generated and manipulated images and spaces."

[Marie-Hélène Parent](#), a visual and new media artist from Québec City, uses a self-developed interactive tool based on body movement called Sketch-In to address concepts of transformation of beings and their environment. Her installation *Fluxus∞* (2015) is transformed via different types of internet data flow such as environmental and energy newsfeeds on Twitter and through the presence of people near the video wall in the lobby of the Canada Council for the Arts.

British Council's creative economy support

One aim of the British Council is to connect the creative sector with the tech sector, particularly in emerging economies. The British Council leverages its trusted networks and relationships with established institutions – and persuades British creators to try out more experimental technology in foreign environments.

- An example is the 2013 "Culture Shift" the Council organized in Russia with a number of partners. It involved a 48-hour hackathon from all across Russia that challenged arts institutions to find creative solutions to reach audiences – as well as working on prototypes to bring them to the fore.

- Another example is the "Playable City" developed by the Watershed Arts Centre in Bristol – who are leaders in the use of design-thinking and iterative processes. It has developed an antidote to the 'smart city' dialogue of the past few years. Prototypes of the Playable City in Bristol town centre have been taken to Brazil, Japan and Nigeria to test social space, social interaction, and the role of technology and art in completely different environments.

4.1.2. Considerations regarding digital technology and creation

One of the most frequently raised concerns regarding programs for supporting the use of digital technology - whether for creation, dissemination or capacity-building - was digital literacy within the funding organization as well as among the recipient arts organizations and artists themselves. Another cross-cutting concern related to effective funding administration and the pace of change in the digital world. These concerns are explained below.

Digital literacy of applicants

In many of the jurisdictions explored, fund administrators observed a general lack of comfort or familiarity with digital technologies for creation in the arts sector. Indeed, the issue of digital literacy cuts across creation, innovation, dissemination, capacity building and social inclusion. Some programs, like Nesta's support of R&D in the arts, explicitly posted as objectives the actual experience of the arts administers/creators working with technical firms.

Certainly, some arts organizations have been early and enthusiastic adopters of digital technologies in the creation of new works, as noted in Section 2.2 of this report. Nonetheless, particularly in the first years of implementation of their funding programs, administrators observed the following:

- Many projects were not truly innovative (for example, enhanced websites, PDF versions of already-published books, etc.),

- Many were not likely feasible (attesting to the applicants' lack of familiarity with appropriate digital technologies – an organizational capacity issue), and

- Generally, projects were not well developed.

The role of the fund administrator (e.g. project officer) was all the more crucial, in terms of providing advice to applicants and bringing potential project partners together.

Digital literacy of fund administrators

Whether applications are assessed by fund staff or by outside peer assessors (e.g. juries), some interviewees noted that it is challenging to find suitable digital content/technology expertise. For more established funds such as DICRéAM, which has developed internal expertise and incubated a digitally-literate arts sector, technology expertise is not considered problematic. However, other fund administrators noted the significant effort required to bring program managers "up to speed" with technologies and their potential uses in art creation. Some observed that it is not sufficient for program managers to attend festivals or trade shows. They need to be knowledgeable about the artists, technology developers, software and games developers, research facilities and other players in the digital arts ecosystem.[27]

Flexibility and speed of process

If overly prescriptive, fund guidelines might constrain innovation, preventing projects that involve new or unforeseen approaches to take shape. This observation is true as much for programs targeting creation as those targeting innovation, dissemination, and capacity building. Numerous interviewees noted the need for flexible, fairly open project eligibility criteria. They observed that it is simpler to specify the kinds of projects that are ineligible than to specify those that are eligible. Alternatively, some funders gave examples of types of projects that could be funded, while leaving the funding guidelines relatively open. This approach is the case, for instance, with the "Strategic Initiatives" stream of the Canadian Cultural Investment Fund (administered by the Department of Canadian Heritage), and ACE's Grants for the Arts.

---

[27] But there were exceptions. For example, the Ontario Arts Council felt that officers and jury participants made a real effort to be up to speed on the latest technology application. For the OAC, digital familiarity was not a central problem.

One issue noted arises from the difficulty in predicting the direction that new digital technologies will take in a rapidly evolving environment. Given the time lag between the development of fund guidelines, their publication, and application deadlines, guidelines that are overly limiting or prescriptive might inadvertently prevent applicants from using the newest technologies or approaches. In this environment, it is easy to conclude that faster guideline development and application processing by fund administrators can help alleviate bottlenecks when timeliness is important. Arts funding organizations in Australia and New Zealand have introduced "quick response grants," offering small grants to artists and community arts organizations, with fast turnaround times on applications.

4.2. Strategies and programs for innovation and R&D

Digital technologies enable arts organizations to drive their arts practice beyond the confines of a single artistic discipline, and even beyond the arts. These digital innovators or experimenters often work collaboratively with other arts organizations or artists, engineers, academics, scientists and experts from other fields to develop multi-disciplinary projects. Most arts organizations surveyed in other jurisdictions have websites, some social media presence, and often the ability to sell tickets (and sometimes merchandise) online. Since it is believed that digital innovators are more likely to take risks, experiment, network and if publicly supported share their experiences, various jurisdictions have sought to spur R&D and innovation among their grant recipients.

4.2.1. Examples of programs supporting innovation

Some jurisdictions, such as the US (state level), the UK and Quebec have created programs that support arts innovation. They may support more experimental or risky projects (New York State Council for the Arts, or NYSCA), support arts-related R&D projects (Nesta), or provide a virtual "laboratory" for the exchange of ideas among artists, academics, scientists and the general public (*Culture pour tous*, Quebec). Nordicity explored the following programs and initiatives that encourage innovation and R&D in the arts:

- New York State Council for the Arts
- Nordic Culture Fund
- Nesta`s Digital R&D Fund
- Lab culturel in Quebec

Each of these initiatives is discussed below.

Encouraging risk-taking: NYSCA and the Nordic Culture Fund

NYSCA's Electronic Media and Film program supports arts organizations that submit projects using technology as an integral part of the art form, rather than as a communications vehicle or platform. Within this program is an initiative, "Workspace, Art and Technology," which provides small grants (usually USD 5,000 to 10,000) for arts organizations to "encourage research and experimentation, support risk-taking ventures and to stimulate creativity and imagination" that occur outside the organizations' regular activities. Launched as a pilot three years ago, the initiative allows arts organizations to "dream" and explore more leading-edge applications of technology in the arts. While risk-taking is encouraged and projects may fail, NYSCA requires applicants to provide very specific goals and project descriptions, and to provide detailed post-project reports on the reasons for success or failure of the project.

The Nordic Culture Fund also launched an initiative to support more innovative or riskier work incorporating digital technologies, but approached this support quite differently from NYSCA. Rather than providing a number of small grants for innovation, the fund supported a single large project (contributing approximately C$ 600,000 or about 20% of the entire fund) called Digital 2015-16. It was determined that truly innovative, interdisciplinary, interactive digital art that involved partners from different Nordic countries was beyond the scope of any one national arts funding body, and that the Nordic Culture Fund had the mandate and resources to support a high-impact digital work. The result, called "Hybrid Matters," is a bio-art project combining elements of biotechnology, life science, art and digital technology.

Digital R&D Fund (UK/Nesta-ACE-AHRC-Creative Scotland-Arts Council of Wales)

Managed by Nesta, the Arts Council of England (ACE) and the Arts Human Resources Council (AHRC) concluded a 2012-2015 £ 7M R&D project involving some 52 projects. Creative Scotland also participated with another ten projects, as did the Arts Council of Wales with seven projects.

The operational assumption was that since R&D works in other sectors, incentives to bring technology into the arts sector would lead to greater experimentation, innovation, and adoption of technologies that would further the mission of the arts organizations. The projects accepted for funding were led by those with combined art forms, followed by visual arts, theatre, and generally creative solutions in that order. Most projects in one way or another were directed to reaching and engaging the audience, including building literacy, connecting with the hard to reach, and the development of data collection and management.

The Nesta R&D program also included a companion survey - a digital capacity and usage assessment of arts organizations in the UK. It was conducted once per year over the three years in which the program operated. Various measures of technology adoption were recorded for all aspects of the creation, presentation, operations, and business models for arts organizations – mainly those receiving funding but some not. The survey questionnaire was very thorough. However, results showed that there was some backsliding among the respondents concerning the use or anticipated use of digital platforms from year to year. In itself this kind of result is not necessarily negative, for the arts organization may have realized the realities of using specific digital systems – what was feasible to take on, and what would be the real benefits of adoption.

It was reported to the project team that the Welsh equivalent R&D fund, still in operation, has a somewhat different approach - it aims more to start with a problem, and not to rush to build out a solution with a technology supplier/partner.

- Some interviewees noted that any R&D program structure depends on whether the desired outputs are technological innovation, the practice of R&D, or the straightforward financial ROI. As one interviewee asked, "is the driving force for a program 'purpose' or 'serendipity'?"

- Another interviewee pointed out that more workable and useful results would have been achieved if the themes had been better specified as to outcomes, rather than kept open ended. That might have led to a more focused attention to the creation of a common ticketing platform, for example.

There is a follow-up arts accelerator program that Nesta has launched, based on the principle that what has worked in tech might be applied to the arts. In the arts, the investment could be social as well as for profit. Any successful result would lead to financing or revenue diversification by the arts

organization, and maybe deliver some unique advantage to the arts organization in its creation, presentation or operations. Generally speaking, according to interviews, there appears to be a lack of imagination among arts organizations about improving business processes. That is partly explained by the general belief that arts innovation lies mainly in the artistic side of the operation, while the rest of the operation tends to be the later adopter.

For **Creative Scotland** there is a mixed tradition of the arts and the creative industries, given the merger of Scottish Arts Council and Scottish Screen. This dual heritage produced an Innovation Fund, based on the realization that digital was a disruptive force. It was triggered mainly by the rise of interactive media and electronic games, and resulted in cross-arts/media, e.g. music/games and digital distribution. There were other innovation oriented programs, including "geeks in residence" at arts organizations, where hackers were brought in to experiment with technology and the arts.[28]

The *Lab culturel - Culture pour tous* (Quebec)

Launched as part of the province's digital cultural plan, the *Lab culturel* is administered by *Culture pour tous* (an independent cultural not-for-profit). This initiative provides grants for innovative, "off the beaten path" projects that increase citizen access to and participation in Quebec digital arts and culture. Interestingly, one criterion for funding is that the project document lessons learned that could be made available to other arts and culture organizations. Irrespective of whether the project succeeds or fails, in the words of *Culture pour tous*, "the process is as important as the result."

The administrators of the *Lab culturel* observed that, for the first funding round, applicants required more guidance in developing and executing their projects than was initially anticipated; therefore, the *Lab culturel* is devoting more resources to guiding and supporting funding recipients. Projects will also be broken down into separate stages, with specific deliverables every six months; in this way, project risk is lessened as projects are funded from stage to stage.

4.2.2. Considerations regarding digital technology and arts innovation

Some of the key challenges highlighted through the interviews and research related to organizational and sectoral knowledge, and balancing the need to encourage risk with the offsetting need to manage it. These challenges are described below.

Capturing lessons learned

In the case of funding programs and initiatives that have existed over a few years, administrators build up knowledge regarding how to structure digital projects, project governance, new technologies, potential project partners outside the arts sector, project successes, etc. This knowledge can be invaluable to future funding applicants, researchers, policy-makers and so on. Numerous interviewees alluded to the fact that these "lessons learned" are rarely documented or gathered into a single site. This gap can be due to a lack of administrative or management resources, the volume of applications to process by small teams, loss of organizational memory, or the absence of a formal program evaluation process. Nesta was able to capture some of this knowledge with the publication of its evaluation of the Digital R&D Fund, while *Culture pour tous* is publishing brief "lessons learned" from

---

[28] The Australia Council for the Arts had a similar "geeks in residence" initiative, with mixed results. While it encouraged recent technology program graduates to explore the arts, arts organizations tended to treat these "geeks" as technical support, rather than as key collaborators in digital creation projects.

funded projects within a few months after project launch.[29] The Space, in the UK, also aims to be a repository of case studies and learning on digital arts.

Innovation in business models

While programs exist to support innovation in the creation of digital art works, innovation in capacity building is more challenging. Nesta's Digital R&D Fund for the Arts documents useful lessons learned through the 2016 program evaluation. The general conclusion of the evaluation[30] was that the projects raised the digital capacity, digital literacy, and confidence of the funded participants, but there was much less impact in the wider community. It was noted in the evaluation that while there were specific positive impacts, the challenges of developing successful new business models remain. In fact, the lead question that was posed by the evaluator as to what to consider in the future was "how to encourage radical, sustainable change in business models," which the evaluator considered critical for changing the current paradigm.

Bridging organizational cultures

Encouraging digital adoption or expansion in arts organizations involves bringing together artists and technology experts, and trying to bridge the different cultures of each side. One comment regarding the challenges of the Digital R&D program was the different philosophies and even work rhythms that characterized the arts vs. the technology organizations. Arts organizations tended to be governed by the production schedule, while technology companies worked toward product launches and constant upgrades. Often there were academic institutions involved, which were entirely bound by the schedules of the educational institutions themselves. Getting them to work successfully together was a challenge.

Innovation, R&D, or strategic funding?

One lesson from the UK's interrelated Digital R&D programs is that articulating the right signal to applicants is critical. They will submit different projects depending on the nature of the call. For example, funds will trigger different responses among applicants, depending on whether they are called "R&D", or "innovation" or "strategic." Of course, key to success in good communication between funder and applicants, and it seems the more criteria can lock into what is really needed, the better the chances of being more effective.

4.3. Digital access to audiences and markets

Digital technologies enable arts organizations to reach and engage with more diverse and disparate audiences, and reach new and younger audiences. And, thanks to digital technologies, formerly passive "users" of content are transformed into digital co-creators who can engage or interact with content and influence its direction. These co-creators are not audiences to which companies market content, they are participants in content creation and dissemination, with significant influence through

---

[29] Although this approach has not been implemented, one interviewee suggested that, to build greater collective knowledge among artists and technicians, funded artists document each step of the execution of their project. Using as its inspiration the open-source code repository Github, this digital arts repository could also make code available on an open-source model.

[30] http://artsdigitalrnd.org.uk/wp-content/uploads/2016/05/Digital-RD-Fund-for-the-Arts-Evaluation.pdf

social media and other tools to build awareness of content, critique it, and share it with their online communities.

Not all the digital natives want to co-create, but they still engage and "demand" that the arts organization and its principal creative representatives feed them material outside the actual events. This millennial style engagement is typically foreign to an older generation of arts organization administrators and artists – and may require rethinking of the interactions with the newer adherents.

At the same time, however, arts organizations face the challenge of retaining their "non-digital" audiences and making their content available both offline and online. Some arts organizations in other jurisdictions note the further challenge of appealing to audiences that expect content that is interactive, easily accessible and frequently updated. In essence, arts organizations operating in the analog or physical world need to engage with audiences that are, increasingly, living in the digital world.

Arts funding organizations can provide a variety of measures to address these challenges, for example:

- One is to require funding applicants to provide a dissemination/exhibition/distribution plan with the project application (indeed, this is often the case for creative industries funding programs). The intent, according to our interviewees, is to encourage artists to build dissemination considerations into their art work at its inception, rather than at the end of the creative process.

- Another approach is to create funding streams for digital dissemination or marketing and promotion, discussed further below.

- Another somewhat more radical approach is to encourage and support the organizational change.

4.3.1. Examples of programs supporting access

Nordicity explored the following programs and initiatives target the marketing or dissemination of digital arts and culture content:

- DICRéAM's Aide à la diffusion
- OMDC`s Interactive digital media marketing fund
- TéléQuébec's Fabrique culturelle
- The British Council's approach to accessing international markets

Each of these initiatives is discussed below. Also discussed below are the possibility of creating online platforms, and the promotion of arts and culture in international markets.

Digital content exhibition: DICRéAM's *Aide à la diffusion*

This program supports the online or physical exhibition of avant-garde digital art works. Grants of up to €10,000 are provided to festivals, biennales, exhibition venues or other public presentations of these works in France, and projects are evaluated by a jury based, among other criteria, on the quality of the programming or exhibition approach, and the appropriateness of the approach given the potential audience.

Interactive digital media marketing fund

The OMDC offers a variety of support initiatives for interactive digital media (IDM) projects, and equivalent support for other creative industries. Within OMDC's IDM Fund is a Marketing Support stream that provides contributions of up to $50,000 for marketing campaigns tied to productions that were supported through OMDC IDM production funding. While considerations of revenue streams and return on investment are key for OMDC, the Marketing Support stream is of interest nonetheless, as it can support the creator's consultation with an online marketing, social media or public relations specialist; the creation of tailored marketing and promotional tools to encourage domestic and international visibility (e.g. trailers, websites, print material) event costs, etc.

Quebec portal for digital cultural content

Launched in 2014 by Télé-Québec, the *Fabrique culturelle* combines elements of a web magazine, an online video channel and a social media site for arts and culture in Quebec. Content is produced both by Télé-Québec teams and by non-affiliated arts and culture organizations, which can receive project funding from CALQ and in-kind post-production support from Télé-Québec. Content on the site focuses specifically on cultural content, including circus arts, multidisciplinary art, visual art, digital art, theatre, dance and other art disciplines.

Cultural relations and access to foreign markets

The British Council has launched UK-India 2017, an initiative to showcase UK creativity to India's online audiences. In this context, the British Council will be funding five digital projects from the UK. In addition to creating closer cultural ties with India, this initiative is also intended to encourage creative collaborations and research between the UK and India, showcase "great" digital work from the UK, and reach and engage with new audiences particularly in the 18-40 age group. This initiative follows a pilot project with China, and was successful in facilitating better practices among British arts organizations to communicate online to quite difficult markets.

Performing Arts Organizations Using Digital Technology

Montreal creative opera company **Chants Libres** used digital visual technologies in their most recent main stage opera production [The Trials of Patricia Isasa](#) (May 2016 premier). This creation-focused company has been incorporating digital technologies in their staging and performance aesthetics for a number of years now.

Toronto theatre company **Canadian Stage** presented [Helen Lawrence](#) (2014), a large scale collaboration between visual artist Stan Douglas and television screenwriter Chris Haddock. The innovative combination of live stage performance with a video green screen background recreated two settings from postwar Vancouver attracting international co-production partners from Scotland and Germany.

The **Shaw Festival** in Niagara-on-the-Lake presented their adaptation of [Alice in Wonderland](#) (2016), which combined traditional riggings, motorized props and cutting-edge video projections. These innovative techniques created the impression of flying and other special effects to dazzle audiences and portray the magical world created by Lewis Carroll.

4.3.2. Considerations regarding digital technology and access to works

The role of intermediaries

While much is made of the openness of the online world, and the ability of creators to self-publish or post their content online fairly easily, getting noticed online – discoverability – is a significant challenge. Search engines can draw potential users/audiences/co-creators, but search engine optimization comes at a price. In the non-digital world, intermediaries such as broadcasters, galleries or bookstores could curate or gather content in an intelligible way to create content clusters and drive users to content of interest to them. Moreover, in broadcasting, legislation and regulations supported making domestic content more visible and accessible.

In the digital world, intermediaries have emerged, but now they are search engines, subscription video-on-demand services, music streaming companies, online booksellers, video streaming sites, and social media sites. These intermediaries require big data and use data analytics to determine the prominence of content and whether to take on artists in their repertoire. The curation function of these intermediaries is not regulated or dictated by public policy considerations, but the digital discoverability of an art work requires artists and arts organizations to use these intermediaries, or to create their own platforms (discussed below).

Complementarity or duplication?

Direct funding of portals or platforms, such as the earliest version of BBC's The Space, or the Fabrique culturelle, can enable more experimental projects to have a means of reaching the broader public. One challenge, however, is that these funded portals perform a function similar to global, broad-based, commercially funded video streaming sites such as YouTube or Vimeo. Consequently, funded web portals may in effect duplicate more visible and established sites. In addition, the discoverability of these funded portals will be a far greater challenge than through commercial sites, thus also compromising the discoverability of the digital works featured on the funded portal. The funded portal may, however, be useful as a secondary or ancillary exhibition window for digital works whose initial dissemination may be via festivals, gallery installations, live performances or other means. Their curation functions can be important to the objective of discoverability, if they succeed in generating significant traffic.

4.4. Digital capacity building in arts organizations

Digital capacity building for arts organizations can run the gamut from encouraging the development of organizational digital strategies, supporting human resource development and training in digital technologies, making more extensive use of audience and financial data to enable targeted marketing campaigns or benchmarking financial performance, and making capital investments to modernize technology infrastructure. For example, through the Strategic Initiatives stream of the Canadian Cultural Investment Fund (administered by the Department of Canadian Heritage), numerous

technology projects with national reach and multiple partners, or involving multiple arts disciplines, have been supported.[31]

4.4.1. Examples of programs supporting capacity building

Nordicity explored the following programs and initiatives that support digital capacity building in arts organizations:

- Key metrics for arts organizations: ACE and DataArts
- Providing advice and expertise through The Space
- Crowdfunding through the Australian Cultural Fund
- Arts and culture interns through the Cultural Human Resources Council

Each of these initiatives is discussed below.

Key metrics for arts organizations

Some 663 ACE-funded National Portfolio Organizations (NPOs), which collectively will have received over £1 billion from 2015 to 2018, account for approximately 75% of ACE funding. Since the 2013 adoption of the Creative Media Policy, ACE has encouraged NPOs to gather, share and make use of audience data. ACE wants NPOs to develop a better understanding of their audiences through a data-gathering and -sharing culture, and this is enabled through digital technology.

More specifically, ACE has entered into a services agreement with private research, consulting and measurement firm, The Audience Agency. The Audience Agency gathers data on box office sales (online and offline), audience surveys, website visits and social media traffic, for all NPOs. NPOs create their own accounts and have free access to data – presented in dashboard format – on their audiences, as well as regional and national-level comparable data. NPOs can better understand the characteristics and behaviours of their online and in-person audiences with data by date, region, venue, market segment, etc. and generate custom reports to enable more targeted marketing and promotion, exhibition/touring strategies, and better audience and business development[32].

In addition, ACE has been funding a Quality Metrics project, led by the arts and cultural sector and with the participation of 150 NPOs and major museums in a national test (using three events, performances or exhibitions per arts organization). The metrics themselves are 12 statements, relating to the event/performance/exhibition concept, presentation, distinctiveness, enthusiasm, local impact and other metrics, which are assessed by the arts organization, its peers and its public. Metrics data are uploaded to an online platform and made available to participants as they explore audience development, create dialogue with their peers, and consider new works or initiatives[33]

---

[31] In a 2014 evaluation of the Fund, it was noted that over 60% of projects supported between 2010 and 2014 contained a digital component. See Department of Canadian Heritage, Office of the Chief Audit and Evaluation Executive Services Directorate, "Grouped Arts Evaluation: Canada Arts Presentation Fund, Canada Cultural Spaces Fund (CCSF), Canada Cultural Investment Fund (CCIF)," August 2014.
[32] ACE has required NPOs to sign up for Audience Finder (the tool developed by The Audience Agency) since April 2016; consequently, it is too early to report on results.

[33] At the time of writing, Nordicity was conducting an evaluation of ACE's Quality Metrics project and thus it was too early to point to quantifiable results.

In the US, the **Cultural Data Profile** initiated by DataArts provides arts organizations with a similar tool, but using financial and program-related data.[34] The tool is available for a fee; some 10,000 arts organizations complete a survey that covers financial, programming and audience-related inputs. From this information, arts organizations can apply through the DataArts portal for grants from foundations, and can generate reports and insights on their financial and audience performance over time, and benchmark themselves against their peers.

Building capacity through commissioning: The Space

Launched originally in 2012 as a web-based showcase for art from the UK, **The Space** has recently made a significant shift[35] and taken on more of a capacity-building role for UK artists. Funded by ACE, Creative Scotland, the Arts Council of Wales and the Arts Council of Northern Ireland, with training and development work supported by the BBC, The Space commissions digital works in three categories: (I) works that capture live performances and make them available digitally; (II) works that extend the live art experience, and (III) works that are born digital.

- Equally important is the role that The Space plays in support artists in digital skills and audience development. The Space staff can provide direct expertise and guidance with commissioned projects, from supporting the creation of marketing and distribution plans, project management, technical know-how, etc.

- The Space also organizes events for artists to learn about the use of digital technologies in the arts, and makes extensive resources available for artists considering submitting a project.

- Finally,The Space publishes case studies and lessons learned from commissioned projects, with a view to supporting digital learning for the arts community at large.

The Space provides an interesting example of leveraging the skills and technology of a commercial creative industry partner (the BBC) to support the development of digital know-how among arts organizations. Since the direction is new, there is as yet no track record of its success.

Crowdfunding the arts: Australian Culture Fund (ACF) and beyond

Created in 2003, but relaunched as an online platform in 2015, the ACF is one of three crowdfunding initiatives of Creative Partnerships Australia, a government-supported body that facilitates tax-deductible donations to the arts.[36] Using a format similar to the crowdfunding site Kickstarter, but focusing strictly on Australian arts and arts organizations, the ACF enables arts organizations and artists to "pitch" their projects directly to potential donors via the ACF website.

Potential donors can select projects of interest and donate amounts as small as two Australian dollars to the project; funds are amassed and ACF transfers them to the artist at the end of the fund-raising campaign. While many donors are motivated by the tax benefit, the majority of donations are in the two- to fifty-dollar range, suggesting that donors are also motivated by a desire to support Australian artists. Last year, the ACF supported over 300 projects with total donations of $1.9 million (Australian).

---

[34] The Canadian equivalent is Canadian Arts Data (CADAC): http://www.thecadac.ca/cms/en/reports.html

[35] It was formerly oriented toward dissemination through streaming, but now has a new orientation as described.

[36] Donations are made to Creative Partnerships Australia, which is endorsed as a deductible gift recipient under Australia's *Income Tax Assessment Act*.

In 2012-13, the Australian Ministry for the Arts provided funding to Creative Partnerships Australia for matching grants to artists (the MATCH program) and arts organizations (Plus1).

This program supports capacity building, creation and promotion. It deserves attention, in part for the interesting way that public funding supports projects and organizations that can demonstrate an engaged community of interest. As well, the ACF, like the many crowdfunding sites that have emerged since its inception, uses a social media interface, where users/supporters can comment on projects, find similar projects, follow the progress of fund-raising, view artist profiles and find out who else has supported the project.[37] This in turn enables artists and arts organizations to raise funds potentially from a far wider audience beyond local supporters, raising awareness of their work and even promoting it before its creation.

An interesting example of a crowdfunding site that supports recurring funding is Patreon. Artists and arts organizations can seek funding for a slate of projects, a campaign, or ongoing operations. While donations are small (the average pledge is just less than $7 US), it could be a useful model to support precarious project-based funding.[38]

Arts and culture interns: Cultural Human Resources Council (CHRC)

Bringing together representatives of various arts and culture organizations to focus on cultural workforce development, the CHRC has a variety of initiatives and tools to support digital media literacy in arts and culture organizations, and workforce preparation for students and training organizations in arts and culture. The CHRC administers an internship program, Young Canada Works at Building Careers in Heritage, on behalf of the Department of Canadian Heritage. The program supplements salaries paid by arts and culture organizations that hire recent post-secondary graduates for four to 12-month terms. In CHRC's experience, the most sought-after skill that arts and culture employers are seeking from interns is digital literacy. In effect, the younger generation of interns brings a knowledge of the tools, culture and potential of digital technologies that an older generation of cultural leaders lacks. The interns are "mentored" within these arts and culture organizations, but arts and culture professionals also learn valuable digital technology skills and an understanding of digital culture.

---

[37] The Canada Media Fund has also supported research into crowdfunding and maintains a section of its website on the subject, at canadamediafund.ca.

[38] See www. Patreon.com.

Festivals and Other Site-Specific Uses of Digital Technology

New Forms Media Society (NFMS) produces the annual New Forms Festival as well as a growing schedule of year-round public presentations, raising the profile of artists, media arts, underground and subversive arts movements and practices both in Canada and abroad. The Society exists to unite creative communities, push artistic and conceptual boundaries, and make new media art, music, film, technology-based installation and performance accessible to a wider audience.

Lemieux Pilon 4D Art develops fusions of dance, theatre, music, visual arts and technology. Created by Michel Lemieux and Victor Pilon in collaboration with Michel Marc Bouchard, Cité Mémoire (2016) is loosely inspired by the history of Montreal and invites the public to meet a host of characters who've witnessed the city's evolution. Over 20 multimedia montages unfold with images, words and music, while projected on the architecture of Old Montreal.

Portrait Sonore is an independent non-profit organization that uses mobile technologies to enable knowledge sharing and help people experience the built heritage of various Canadian cities in a unique way. At the crossroads of urban planning, architecture, history, art and music, each of the podcast documentaries or 'walks' is the culmination of rigorous research.

4.4.2. Considerations regarding digital technology and capacity building

Capacity-building initiatives can encourage arts organizations to build expertise and digital literacy, and in some cases upgrade or develop their technology infrastructure. Because they often involve specific initiatives, rather than long-term investments, however, capacity-building projects can present challenges in terms of their sustainability, as described below.

Project-based funding

Many of the funding initiatives explored herein provide project-based funding, which enables arts organizations to build some digital capacity – provided it is directly linked to the project. Ultimately, then, knowledge and skills may be lost as web developers and technicians finish their work on a project and move on to another, possibly for a different organization. Technology infrastructure may be built piecemeal as project resources allow. Sustaining digital capacity once projects end becomes a challenge. A US report observes that digital leaders among arts organization alleviate this challenge by having an organization-wide digital strategy.[39] This strategy can enable arts organizations to have a coherent long-term plan for digital adoption, and can help ensure that digital projects use consistent technologies and coherent platforms so that longer-term organizational capacity is built.

Organizational infrastructure first?

Some interviewees noted that arts organizations (particularly smaller ones) are limited in their capacity to lead digital arts projects because they lack sufficient organizational infrastructure (e.g. information systems, software, work stations with adequate processing power and capacity, etc.). Recognizing the infrastructure challenge, in Quebec, the CALQ and the MCCQ took a phased approach to supporting

---

[39] Sarah Lutman, *Live, Link, Share: How Cultural Institutions Are Embracing Digital Technology* (Philadelphia: Wyncote Foundation, 2014).

digital technologies in the arts. Consequently, the first phase of the digital cultural strategy involved creating an infrastructure fund (administered by the CALQ), intended to enable arts organizations to upgrade their technology, equipment and platforms so that they would be better positioned to create and disseminate digital content. While the fund has not been formally evaluated, it did lead to the creation of some partnerships, especially in more remote regions, of arts organizations which pooled resources for shared equipment and common technologies and platforms.

Crowdfunding pros and cons

Crowdfunding, by providing the public with exposure to an artist and a project proposal in the early stages of creation, can help build a connection between artist and audience, and create "buzz" and anticipation for the work before it is made widely available. The process does, however, require a significant investment of time and resources into reaching out to potential donors, building awareness, fundraising skills etc. (though in some cases the crowd funder can provide expertise). The "all or nothing" model of a Kickstarter campaign can be risky, since the project is funded only if the artist raises the entire amount of funding being sought (although the ACF does not employ this model), and crowdfunding by its nature is generally project-based, making it difficult for arts organizations to build ongoing financial capacity. Where crowdfunding can provide recurring funding to an artist or arts organization, the average donations are small, making crowdfunding a potential source of modest supplementary funding, rather than core funding.

Building familiarity and confidence

Arts organizations that are still building their digital capacity are trying to build their skills and confidence in using technology, and dealing with more digitally-proficient partners and suppliers. As noted by the example of the CHRC's interns for arts organizations above, arts organizations have the strong desire to bring aboard digital natives. These digitally-skilled interns are strengthening the ongoing confidence of arts organizations in dealing with digital technologies. In the case of the Nesta R&D program it was noted that participating arts organizations came away with useful experience in dealing with technology suppliers and partners. They were more ready to try new things, and abandon them if they did not work out. They had gained more confidence in harnessing technology, as a result of working with technical people – seemingly more successful than just training courses for the arts organizational staff.

4.5. Digital in Promoting Diversity and Social Inclusion Through the Arts

Programs promoting social inclusion through the arts are often not specifically targeted to digital technologies; rather, they tend to be funding envelopes which groups from more marginalized populations (e.g. indigenous peoples, rural/remote communities, youth, and different forms of diversity) can access for any type of work, irrespective of form.

4.5.1. Examples of programs promoting diversity and social inclusion

In contrast to broader arts initiatives, there are arts initiatives that aim to build social inclusion specifically through digital technologies. Nordicity explored the following programs and initiatives that support social inclusion and promote diversity:

- Quebec's Scènes ouvertes
- Creative Scotland's Time to Shine Digital
- Telefilm's Micro-Budget Program

Each example is discussed below.

Scènes ouvertes

As part of the *Plan culturel numérique*, the Quebec government funded a project administered through the *Société des arts technologiques* (SAT), targeting remote regions and indigenous peoples. The *Scènes ouvertes* project, launched in 2014, enables artistic co-creation and networked performances across large distances, linking 10 indigenous communities and 20 creative centres using very high-speed Internet and a SAT-developed software suite enabling the transmission of audio, video and data. Although the project is currently underway, some centres (Quebec City, or the Bas St-Laurent, for example) have been networked and now have digital performing arts venues.

Engaging with youth: TTS.Digital

Creative Scotland announced a new program in April, 2016 - Time to Shine (TTS.Digital) or Lights, Bytes, and Curiosity. It aims to bring together digitally savvy youth with arts organizations in order to facilitate projects that were more geared to the millennial lifestyle. In this program content creators/artists are encouraged to use skills of imagined futures, connecting art and technology with youth involvement as they best understand the new communications world. They will be trying to get arts organizations to think, provoke, challenge, and re-imagine how they can work together more effectively.

Aboriginal and official language minority production in the Micro-Budget Production Program

This Telefilm program, described in more detail above, includes components for self-declared Aboriginal producers, and for official language minority communities. One element that distinguishes this Program from other Telefilm and arts funding programs is the requirement that all potential applicants work with project partners such as film cooperatives or independent media organizations that operate programs for emerging producers, to structure a pre-proposal.

For example, there are eight potential partners for Aboriginal producers, including the Nunavut Film Development Corporation, the Adam Beach Film Institute, and Wapikoni Mobile; among the partners for official-language minority producers are the New Brunswick Film Co-Operative and the *Institut national de l'image et du son*. Program applicants must have taken training from a partner organization or be members of a partner co-operative. Thus, the partners can support first-time creators in developing and structuring their project proposal to Telefilm, and can help build the capacity of communities of creators with whom they already have a training or skills development relationship.

> ## Artists Using Digital Technology for Inclusion
>
> Art + Feminism Wikipedia Edit-a-thon is a campaign to generate coverage of women and the arts on Wikipedia and encourage female editorship. Art+Feminism invites people of all gender identities and expressions, particularly transgender, cisgender, and gender nonconforming women, to address absences by organizing in-person, communal updating of Wikipedia entries. Institutions that participated in 2016 included Concordia University, the Art Gallery of Ontario and the Banff Centre.
>
> Skawennati's pioneering new media projects include the online gallery/chat-space and mixed-reality event, *CyberPowWow* (1997-2004); a paper doll/time-travel journal, *Imagining Indians in the 25th Century* (2001); and *TimeTraveller™*(2008-2013), a multi-platform project featuring nine machinima episodes. The Montreal-based artist is Co-Director of Aboriginal Territories in Cyberspace (AbTeC), a research network of artists, academics and technologists investigating, creating and critiquing Indigenous virtual environments.
>
> AbTeC co-founder Jason Edward Lewis is a professor in design and computational arts at Concordia University and founder of Obx Laboratory for Experimental Media. His work uses digital environments to assist Aboriginal communities to preserve, interpret and communicate cultural histories.

4.5.2. Considerations regarding digital technology and social inclusion

Benefits of inclusion

Digital arts funding programs targeting social inclusion are instructive for arts funders, in addition to providing critical support to excluded communities. As the Creative Scotland example shows, creating targeted programs for communities such as youth allows for creative cross-fertilization to occur between arts organizations and different communities, and bring new perspectives to arts funders themselves. In its youth arts strategy, Creative Scotland affirms that "Technology has enabled young people to intuitively understand the relationship between creation, production and distribution. Adult stakeholders have worked to do to meet their expectations."[40] Similarly, *Scènes ouvertes* can help in bringing remote and Aboriginal artists' perspectives and approaches to urban, non-Aboriginal artists, by building the technology infrastructure to do so.

Inclusion of people with disabilities is another key area of intersection with digital technology. Accessibility is one of the major learning themes of Nesta's Digital R&D Fund for the Arts.[41] Nesta found that improvements aimed at people with disabilities led to improved experiences and higher levels of engagement for everyone. Encouraging art by people with disabilities is also a priority in Canada. While nationally the Council offers grants to Deaf and disabled artists, provincial bodies including the OAC and the CALQ have strategies in place to increase the creation of art by people with

---

[40] Creative Scotland, *Time to Shine: Scotland's Youth Arts Strategy for Ages 0-25*, November 2013.
[41] http://artsdigitalrnd.org.uk/wp-content/uploads/2015/06/DigitalRDFundGuide_Accessibility.pdf

disabilities. In Toronto, Tangled Art + Disability expanded from an annual festival to an exhibition space in 2016 that aims to set standards for accessible curation.[42]

Inclusive processes

As the Creative Scotland and Telefilm initiatives show, it is critical to involve these communities in designing and delivering support programs. This involves more than simply conducting consultations; it involves participation at the conceptual development, design, implementation, evaluation and revision stages, and it involves making the tools available for meaningful participation and collaboration to occur (which *Scènes ouvertes* has the potential to do).

5. Practices, Precedents, and Conclusions

In this section we consider broad lessons learned from the review of strategies and programs and in the course of our interviews.

5.1. Digital art form vs. digitally enabled art works

Some funders and artists draw a distinction between digital art works where technology is integral to the art form, and works where technology serves as a communications vehicle or enhancement to a more traditional art work. "Digital art" can therefore be considered a standalone discipline, while digitally-enabled art can involve digital extensions to the visual arts, dance, theatre or other art forms.

At the federal level in Canada, various forms of digitally-enabled creation are supported by the Department of Canadian Heritage (books, music, and periodicals), Telefilm Canada (film), and the Canada Media Fund (television and interactive digital media). These funders do not, however, target funding to experimental, innovative digital art projects.

5.2. Is it digital enough?

At some level, it could be argued that all Canadian arts organizations are using digital technologies, even at the simplest levels of email, mobile phones, or web browsers. Surveys undertaken in the US and the UK show that the vast majority of arts organizations have websites (often mobile-optimized) and profiles on social media sites, track digital use metrics (usually using Google Analytics), accept donations online, sell tickets online, and post or stream videos on their websites.[43] Many organizations see digital as important to marketing, preserving and archiving, but less so to creating new works.

Several of the funders interviewed had program guidelines for digital creation that were deliberately open, with relatively few criteria with regard to technologies or type of art works supported. In so doing, these funders sought not to constrain arts organizations' use of technology, and wanted to avoid inadvertently promoting the use of "old" technologies based on past experience. The key, many

---

[42] http://news.nationalpost.com/arts/tangled-torontos-first-accessible-art-gallery-for-disabled-artists-is-bringing-the-outsiders-in

[43] See Pew Research Center, *Arts Organizations and Digital Technologies*, January 2013; and Nesta, *Digital Culture 2015*, December 2015.

funders explain, is for digitally literate fund administrators to provide guidance to potential applicants, and for policies and guidelines to be iterative: as skills, technologies, and audiences evolve, so too should funding programs.

5.3. Demonstration effect

How to involve digital leaders in sharing their experience, expertise and knowledge with arts organizations that are less conversant with the technologies and business models? In Quebec, both MCCQ and CALQ point to the importance of creating partnerships and consortia involving multiple arts organizations, small and large, regional and urban, technology leaders and technology followers, that can submit joint projects and encourage collective learning.

Another aspect of this "demonstration effect" comes up when arts organizations collaborate creatively with technology organizations or researchers. As the Nesta experience showed, direct, hands-on experience in such collaboration (rather than simple sharing of case studies or workshops) enables arts organizations to become more conversant with technologies, more confident in exploring their uses, and more likely to innovate.

5.4. Arts organizations engagement with its constituencies

Arts engagement is about more than selling tickets, or sending an emailed newsletter. Connectivity with audiences is no longer just using email to advise them about flexible subscriptions (given that year-long subscriptions are now a hard sell). Instead, engagement for arts organizations is much broader, and in the current environment is it is about stronger connections with a number of constituencies: audience, funders/donors, and the other elements of the ecosystem. It is about recognition that for those fully engaged in social media, the arts organization is in some kind of full time conversation with them so that actual attendance becomes a normal part of their participation. Arts organizations are not generally equipped to think this way, which is one reason, for example, in the TTS.Digital (Creative Scotland's Time to Shine – Digital) is stressing the involvement of millennials in working through new ways of operating in the AIDW environment.

5.5. Measures of effectiveness

Many of the strategies, initiatives and plans explored here are relatively recent and have not been evaluated, as is the case for the *Plan culturel numérique du Québec*, ACE and Creative Scotland's horizontal funding models or capacity-building initiatives, and the initiatives undertaken in Quebec. In other cases, programs have not undergone formal program evaluations. There is a relative dearth of performance measures, therefore, for digital arts funding programs and initiatives.

Where measures do exist, they tend to focus on program "outputs," such as breakdowns of funding and projects by region, discipline, type of activity, etc. The absence of broad "outcome" measures for digital initiatives in the arts could be a function of the diversity of projects supported, arts organizations' lack of resources to devote to data-gathering, or the lack of awareness of the potential of data – particularly audience-related data – to drive strategic decision-making.

Helping organizations build their data capacity is key, both for effective operations (data analytics) and for performance measurement (KPIs). In England, ACE's support of Audience Finder will help with the gathering of systematic, broad measures regarding audiences for both online and offline works or

performances. Similarly, ACE's Quality Metrics initiative will be invaluable for arts organizations using digital technologies to gain a qualitative understanding of audience response to arts events or works. No single arts organization, or even a consortium of arts organizations, would have had the capacity to launch such large-scale, data-driven projects; the funding, platforms and technical know-how have had to come from the arts funding organization itself, in collaboration with third-party service providers.

5.6. Transition or transformation?

While it is clear that digital technologies are having a pervasive, fundamental impact on society and the arts, are arts funders making fundamental changes to their funding models? Generally speaking, the arts and creative industry funding organizations we consulted have made adjustments and additions to their funding approaches, rather than making wholesale transformations to these approaches. For example, "digital art" as a discipline has been added to the disciplines that arts funders now support. New funding streams for the addition of digital elements to more traditional art or creative forms, have been introduced, without supplanting existing funding programs. Enabled by digital technologies, creators are rethinking what it means to create, curate, and consume the arts, blurring the lines between creation and distribution, creator and audience, audience and curator – these are transformations in the creative paradigm. Arts funders have adopted an incremental, transitional approach to dealing with these transformations.

5.7. Alternative program models

Having described many approaches to the question of arts in a digital world, we now synthesize the findings to create different models for arts funding organizations to consider. They include both alternatives as well as approaches which are more complementary than alternative. They are not necessarily "best practices." The reason is that in part these models cover such a wide range of intervention in the arts field, and in part because the effectiveness of these approaches have not been adequately evaluated.

5.7.1. Programs that encourage use of digital and other technology in the creation process and in experimentation

Within this kind of program, the orientation is typically **creation**, and can be aimed at artists or arts organizations – or both. There could be recognition in this kind of program of the evolving role of audiences/users as co-creators and participants in the artistic work. As such, funders could give some consideration to participatory creation, immersive experiences, and exploring new means of engaging the public in the creative process.

Beyond creation, however, it would seem clear that funders should consider criteria which opens up to applications for experimentation on new methods of **engagement, dissemination, and organization** facilitated by technology.

5.7.2. Programs that encourage capacity building

Given that investment in arts organizations is often hard to come by – be they large or small – one alternative model is to encourage facets of capacity development. Apart from facilities renovation, repair, or rebuild, investment would usually involve IT or digital systems, services, and practices.

There are many models of digital familiarization/orientation in other jurisdictions. What doesn't seem to work well is formalized digital training for artists, or even for those working in the non-artistic positions in arts organizations. **Direct experience in working with technical companies** and IT/digital staff seems to bring more confidence and understanding to the arts administrators. Bringing in "geeks" with an arts interest can work, but not necessarily – though the biggest ask by arts organizations for interns appears to be for digital savvy candidates.

This vision of capacity building could encompass the reinvention of the engagement of audiences, and marketing to attract new audiences. It could also include more sophistication in the use of **data analytics**, stemming from the understanding of the behaviour of the new, youngish audience. Arts organizations would build the capacity – individually or, more likely, collectively – to gather data on website visits, ticket sales, audience reactions to performances or works (e.g. quality metrics), audience demographics, etc.

Though there are commercially available solutions for every operational activity, there is scope for adapting existing platforms to address arts organization needs on a shared services basis - in ticketing, marketing, finance, fund raising and other business solutions. While not every functional activity is subject to shared services, focused attention in certain areas is possible for the benefit of artists and arts organizations.

5.7.3. Programs that stimulate innovation in process re-engineering, business models and client centric strategies i.e. transformation

The distinction between transformation and capacity building is not necessarily a large one, but it is definitely a change of mindset. Through a fundamental re-think of the relationship with the patron/customer, the idea is to make the arts organization inclusive, accessible to a broader demographic, younger audience, and to promote curiosity and community development. Although there is no one formulation of the broad objective among arts organizations, some would argue that such fundamental change is required to change the direction of arts organizations.

As yet there is no well-accepted process for determining where arts organizations are on the spectrum of tradition and innovation, or what the correct path is to get there from here. Clearly, within this model, there must be space both for arts organizations that are digitally advanced, and those that are starting to develop digital strategies and capabilities. There are interesting models including the British Council's online distribution of British works into foreign environments, or in Scotland's mixing of youth with existing staff of arts organizations. Perhaps more experimentation and the building of a knowledge base of processes that wrench organizations along the growth path – apart from reacting to crises – is in order.

Programs in constant change

Government agencies charged with developing the creative industries (as opposed the arts) appear to be in constant change. Evolution is constant and program criteria and even objectives change annually. Indeed, it is important to evolve – likely annually. There is always fine tuning and even substantially changing the criteria for eligibility of activities, the eligibility of the applicant, and amount and terms of the funding support. Continued feedback, flexibility yet purpose-driven support, and encouragement of collaboration and sustainability are the foundation of good practices in serving arts organizations in a digital world.

5.8. Conclusions for consideration by the Council

Discussions with some 30 individuals working for other jurisdictions and perusal of some 200 publicly available documents provide the basis for the analysis behind our conclusions as presented below.

Similar challenges, multiple approaches

Perhaps there is no surprise in the finding that many jurisdictions are facing similar challenges in the digital world and are testing similar solutions for the most part. While some jurisdictions

"How can arts organizations get better at digital innovation? The most likely route is by a judicious blend of guidance and incentives from funders, along with improved networks to support peer-to-peer learning. A strong culture of research and experimentation, in business models as well as approaches to production and creativity, will be needed to nourish improved structures and networks."

- - Hasan Bakhshi, Ian Hargreaves and Juan Mateos-Garcia, *A Manifesto for the Creative Economy*, 2013..

have more of a head start, it would appear they were just as prone to make false starts and engender unattended consequences as those with later starts. But within the small band of solutions, there were multiple approaches employed. The challenge for funders is to know and retain the approaches that work (lessons learned), but having the flexibility to adapt to changing needs and evolving artistic practices.

Value of embedding principles and enunciating overall objectives

Although it was found that there was little linkage generally between national digital strategies and the arts, there is merit in imbedding certain principles in the governance of the arts world. For example, the inclusion of digital platforms in the Scottish 10-year plan enables that organization to make sure that applicant firms have some sound plans in terms of operating in the digital environment. That is important for jurisdictions with programs that offer multi-year grants to major arts organizations, so that the arts funder can ensure that its broad digital principles are implemented by funded organizations over the planning cycle.

Focus on the problem, not the technology

While not yet established as a program and certainly before the results have been considered, there are some who conclude that the Welsh approach is to be emulated, i.e. focus on the problem rather than the technology. Initially, emphasis on digital technology led arts organizations to do websites. This approach is fine as a start, but there sometimes appears to be a lack of imagination of the arts organizations as to where to go from there. Therefore, the funder-recipient model should be on solving the problem – by technology only as necessary.

Narrow the objectives when confident of what should be done

In contrast to the need for flexibility and not too much structure is the need to narrow the objectives when there is consensus around a problem and its solution. If the program funds different initiatives that seek to resolve a particular problem, the scope of any one solution may not be sufficient to make real progress. Therefore, when the outcomes are more definable, it is important to fund real responses,

often technical, to the problem that is known. For example, the Nesta R&D Fund triggered different ticketing solutions, when it might have been better to consolidate around a solution that would solve the problem across multiple organizations than finance sub-optimal solutions.

Improve by Iteration and flexibility

Whether the problems need to be specified or kept open ended to enable new solutions, the principle that came up from many sources was the need to iterate the program's funding evaluations. Annual reviews of all aspects of the programs with good consultation processes is part of the process of iterating the program's eligibility criteria and processes. Though being flexible enough not to snuff out some innovative solutions, the program managers should be able to make the requirements more precise – and therefore useful to the applicants facing new challenges and accessing new solutions.

Pilots, demonstrations, and sharing of results

The balance between a pilot program and implementation across the board is a fine one. One wants pilots and demonstrations to test new ideas, and quickly adopt what works. Whether they are characterized as pilots or demonstrations, their results should be shared with peer organizations. Sharing can be stimulated by the funder in various ways, but it is important for the results to be disseminated widely – as long as there is no violation of intellectual property or other proprietary considerations.

Organizational transformation

Given the broad impact of digital technology, no set of considerations would be complete without reference to the need for most arts organizations to undergo substantial transformation – in creating and performing or showcasing new works; in engagement with their audiences and building relationships in the community; and generally overall competing for scarce funds and the mindshare of the audience amid competing attractions.

Not all arts organizations are at the same stage in their development, of course. Some are clearly leaders in their fields, just as others are a bit behind the times – and behind the practices of the more determined organizations who realize they must change considerably to stay even and possibly grow a very loyal and committed audience. Therefore, there is no one "uber-model" of funding programs based on the organization implementing effective change actions to get to that next plateau. Not all organizations need a revolution, but many need to do so for long run sustainability.

Measuring performance is key

Public authorities everywhere are putting pressure on non-profit organizations to justify their expenditures and make the most of their investments. That pressure in turn has stimulated the development of performance measures. In launching the national study on arts' needs, investments and practices for the digital era, the Council has begun to rectify the gap in Canada in the arts community.

But it does not stop there, as one-off measures do not have a lasting effect. In order to lower the expense of regular canvassing of the arts sector for detailed information, the objective should be to design a more automated, simplified data collection process which can track basic results over time. Is the arts organization becoming more engaged, using social media effectively, attracting youth and diverse audiences, and diversifying its revenue sources? These are not digital competency issues per

se, but the arts organization is likely to be able to answer positively when it has deployed digital data collection and analytics.

A Appendices

A.1   Completed Interviews

Name	Title	Organization
Susan Annis	Executive Director	Cultural Human Resources Council
Robert Hunter	Director, Strategic Arts Support	Department of Canadian Heritage
Sophie Couture	Director, Music Policy and Programs	Department of Canadian Heritage
Josée Peloquin	Manager, Content Policy, Broadcasting and Digital Communications Branch	Department of Canadian Heritage
Lise Laneville	Manager, Arts and Policy Planning, Arts Policy Branch	Department of Canadian Heritage
Peter Caldwell	Director and CEO	Ontario Arts Council
Carolyn Vesely	Director of Granting	Ontario Arts Council
Kathryn Townsend	Director of Research, Planning and Analysis	Ontario Arts Council
Janet Hawkins	Consultant, Industry Initiatives	Ontario Media Development Corporation
Erika Kumar	Business Analyst	Creative BC
Sarah Durno	Director	BC Arts Council
Mathieu Rocheleau	Conseiller en développement culturel numérique	Ministère de la culture et communications du Québec
Réjean Perron	Directeur du soutien à la diffusion et au rayonnement international	Conseil des arts et des lettres du Québec
Alain Depocas	Chargé de programme et répondant disciplinaire en arts numériques	Conseil des arts et des lettres du Québec
Sam Mitchell	Programme Manager, Digital Arts & Media	Nesta
Morgan Petrie	Creative Industries Manager	Creative Scotland
Claire Taylor	Advisory Board Member	Arts and Humanities Research Council
Simon Mellor	Executive Director, Arts and Culture	Arts Council England
Fiona Morris	CEO and Creative Director	The Space
Jason Nelson	Director (former)	Australia Council for the Arts
Esther Gyorki	Program Administrator	Creative Partnerships Australia
Anaïs Chassé	Chargée de mission culture et numérique	Fonds SCAN
Pauline Augrain	Chef du service de la création numérique	Centre national du cinéma et de l'image animée
Perrine Vincent	Chargée de mission	Centre national du cinéma et de l'image animée
Melanie de Groote	Coordinatrice	Bouger les lignes, Belgique
Maria Tsakiris	Senior Advisor	Nordic Culture Fund
Jim McDonald	Deputy Director/Director of Programs	Grantmakers for the Arts
Karen Helmerson	Electronic Media and Film	New York Council for the Arts
Jax Deluca	Director of Media Arts	National Endowment for the Arts
Alex Fleming	Head of Marketing and Communications	British Council
Caroline Meaby	Head of Cultural Economy	British Council
Carolle Brabant	Executive Director	Telefilm Canada
Elisa Suppa	Senior Advisor, Strategy and	Telefilm Canada

	Research	
Kenneth Kwok	Director, Arts and Youth and Strategic Planning	National Arts Council, Singapore
Kristen Hardy	Senior Analyst, Book Publishing Policy	Department of Canadian Heritage
John Graham	Analyst, Book Publishing Policy	Department of Canadian Heritage

A.2   Annotated Bibliography: Reports and Policies

Australia

Visual Arts and Craft Strategy: Evaluation Report (Australia Council for the Arts, 2010)

The evaluation examines the way that individual artists and arts organizations were funded by the Australia Council for the Arts between 2001 and 2009. The report finds that a greater number of artists and arts events received funding over this period. It also draws attention to the economic outcomes of arts funding, noting higher revenues and larger audiences. The report identifies four main challenges to the visual arts and crafts in Australia, one of which is the digital era. The report discusses growing audience demand for digital cultural content as well as artists' interests in creating works across multiple digital platforms. However, a limited understanding of intellectual property rights, lack of expertise with digital technologies and unequal access to cutting edge equipment in rural and remote areas all hamper digital innovation in the arts. Although the report identifies significant challenges associated with digital creation and dissemination it does not propose solutions to these issues but rather focuses on the importance of evaluation processes for arts funding organizations.

[Creative Industries, a Strategy for 21st Century Australia](Australian Government, 2011)

The report articulates a whole-of-government commitment to Australia's creative industries in recognition of their contributions to both economic and cultural activity. The report outlines investment in three key areas to ensure that creative industries fulfill their potential of increasing Australia's competitive position in the global economy. The first area of focus is national foundations and the report discusses investments in innovation, digital infrastructure, human capital and research. The second area of interest is commercial capacity, in particular encouraging international trade and investment and identifying market opportunities and consumer demands. The final area is the growth of creative content and services, which requires investments in intellectual property rights, business models and collaborative networks. The report defines creative industries as "the generation of creative intellectual property with the potential to be commercialized." Although the report mentions Australian culture in broad terms, it does not address how support for artistic expression or cultural organizations contributes to economic growth either locally or nationally.

[Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy](National Broadband Network, 2013)

The report provides an update on initiatives undertaken since the release of Australia's Digital Economy Strategy in 2011. The report inventories actions according to fourteen themes ranging from health care and online safety to open data and telework. A commitment to delivering government services across digital platforms underpins the strategy: the goals is for four out of five Australians to engage with the Australian government online by 2020. The report mentions cultural organizations such as museums in relation to education but does not discusses the impact of digital technology on creative content or art forms.

Belgium

[Bouger les lignes : Coupole plan culturel numérique](#) **(Ministère de la culture, 2016)**

Bouger les lignes is an initiative of Belgium's Ministry of Culture that aims to develop a cultural policy for Francophone Belgium that responds to the challenges and opportunities of the 21rst century. The initiative is organized around six nodes: artists first, cultural education, democracy and cultural diversity, cultural entrepreneurship, new governance models and digital cultural policy. Each node is directed by a panel of experts who engage in public consultations and conduct research. The node for digital cultural policy takes a bottom-up approach with a focus on supply and demand and is heavily influenced by Quebec's Plan culturel numérique. Ultimately, Bouger les lignes aims to support the creation, promotion and dissemination of digital culture and regulate the training and working conditions of artists.

[Digital Belgium](#) **(2016)**

The action plan articulates a long term vision for Belgium's digital future anchored in five strategic priorities. The report recognizes digital technology as a primary engine for economic growth, employment and wellbeing. As a result, it aims to boost Belgium to the top 3 of the Digital Economy and Society Index by 2020. The report discusses the following strategic themes: digital economy, digital infrastructure, digital skills and jobs, digital security, and digital public services. Digital Belgium makes no mention of arts or culture.

France

[Rapport d'évaluation du Dispositif pour la création artistique multimédia](#) **(Michel Balluteau pour le Ministère de la culture et de la communication, 2004)**

The report was prepared by the Ministère de la culture et de la communication and evaluates the Dispositif pour la création artistique multimédia (Dicréam). The report traces the development of the funding mechanism from the emergence of interest in digital experimentation in the 1990s to the establishment of the fund as a responsibility of the Centre National de la Cinématographie in 2001. The creation of the fund was premised on the idea that there is a role for national intervention to support digital arts. As a result, the fund supports three main activities: concept development, production, and public events. Although the word numérique was not yet added to the fund's name at the time the report was written, the evaluation includes significant discussion of digital arts. The fact that the fund retains the same acronym (Dicréam) reinforces that it has always been concerned with digital even if its name has evolved to highlight that area of focus. Moreover, the organization of the funding activities emphasizes creative processes rather than artistic disciplines, thereby allowing for overlap and experimentation among emerging technologies and new forms of expression. The report concludes that although the fund has positive impacts on the development and delivery of multimedia projects, grants for public gatherings should be concentrated among a smaller number of events in order to maximize public benefit.

[France numérique 2012-2020](#) **(Office of the Prime Minister, 2011)**

The report was prepared by the office of the Prime Minister of France and builds upon the achievements of France numérique 2008-2012. The report is organized around five strategic objectives. The first objective is to use digital to strengthen the competitive position of France in the global economy. The second is to ensure access to high speed digital networks, with the goal of 100% penetration by 2025. The third objective aims to increase the quality and diversity of digital content

produced and distributed in France. The fourth objective is to diversify the use of digital both through connections with existing public services and through the development of new applications. The final objective is to reform the governance of the digital economy in recognition of the challenges posed by intellectual property rights and the opportunities provided by EU regulation. Although the report acknowledges the ways that digital is transforming the consumption of media, it does not address the relationship between artistic activities and economic output.

Contribution aux politiques culturelles à l'ère numérique (Pierre Lescure, 2013)

The report summarizes the results of 9 months of public consultation, expert interviews and secondary research into the state of French culture in the digital era. The report was commissioned by the minister de la Culture française and resurrects the concept of cultural exceptionalism to highlight the ethical, political and social dimensions of culture. However, in contrast to the original use of the term in the 1960s, the report's authors affirm that the idea of cultural exceptionalism is not only applicable to France but is rather universal. The report proposes 80 measures to reconcile cultural creation with digital innovation and is divided into three volumes. The first volume focuses on increasing access to various forms of artistic expression online. This requires both expanding the range of cultural content accessible across multiple platforms and investing in digital infrastructure to ensure connectivity across the country. The assumption is that increasing cultural content available legally online will detract from pirating and thereby also increase taxable revenues. The second volume examines approaches to both financing digital content creation and remunerating artists who make their work available online. For instance, the report proposes a tax on mobile devices. As a result, the third volume is concerned with the legal framework necessary to protect intellectual property rights, both in France and in the European Union.

Évaluation des aides d'Arcadi Île de France (Cabinet Asdo, 2013)

Arcadi is a publicly funded organization created in 2004 to support digital arts, music, dance, opera and theatre in the Île de France region. In 2012, Arcadi engaged the consulting firm Asdo to conduct an evaluation of the organization's funding activities. Asdo analysed financial statements for the fiscal years 2009-2012 across three programs that fund creation, production and dissemination. In each case, digital arts received the least funding of all of the disciplines. Asdo also performed a qualitative analysis of the impact of funding on: individual careers; the circulation of art works; the diversity of art forms; and, partnerships between organizations. The report concluded that although Arcadi's activities are currently focused on artistic creation rather than dissemination, there is potential to move towards greater support of audience development and interdisciplinary works.

Évaluation du DICRéAM (Inspection générale des affaires culturelles, 2015)

The Ministère de la culture et de la communication commissioned an evaluation of Le Dispositif pour la création artistique multimédia (DICRéAM). DICRéAM was created in 2001 to support artistic works that incorporate digital technologies. The report builds on the results of an evaluation from 2004 to reaffirm that the funding mechanism operates effectively and should be maintained. The report finds that DICRéAM has made a substantial contribution to the arts despite the lack of a coordinated national policy. Specifically, DICRéAM supported more than 4,000 projects in 15 years. The report calls for the annual collection of data into DICRéAM's activities, enhanced partnerships and additional engagement in research, for instance by hosting seminars and events. The report concludes that the positive impact of DICRéAM demonstrates that artistic creation should be incorporated into broader strategies to promote and invest in digital technology.

United Kingdom

[Cox Review of Creativity in Business: building on the UK's strengths](#) **(Sir George Cox, 2005)**

The report was prepared for the 2005 Budget Statement and is addressed to the government of the UK. It is premised on the idea that growing global competition is both a threat and a market opportunity to UK businesses. The focus is on small and medium-sized enterprises (defined as having less than 250 employees) and particularly the ways in which greater use of creative capabilities can respond to emerging economies. The report takes a broad view of creativity as the generation of new ideas. In this context, it finds five main barriers to greater creativity for SMEs, ranging from a lack of awareness or experience with innovation and an uncertainty about where to find support, to a limited appetite for risk. Recommendations include improving government support for R&D through tax credits, using public procurement to encourage creativity and developing a national network of innovation centres. Ultimately, the report concludes that the recommendations could have positive impacts not just on SMEs but on businesses of all sizes but implementation requires collaboration between various government agencies as well as other organizations.

[Digital Britain](#) **(Department for Business, Innovation and Skills and Department for Culture, Media and Sport, 2009)**

The report outlines an approach to putting digital technology at the centre of economic recovery. The report is premised on the Labour Government's concept of industrial activism, which advocates government action in areas where public policy intersects with market forces. The report establishes the importance of digital communications infrastructure and affordable broadband access. It also discusses topics such as digital public services and digital security. Digital Britain contains a chapter on the creative industries and introduces the ambition to make the UK a global creative capital. The bulk of the chapter focuses on legislative proposals related to modernizing licensing in order to both protect and reward creativity. The chapter also acknowledges the need for new business models monetize interactive new media as well as traditional art forms such as film and literature. Overall, Digital Britain presents creative industries as just one part of a competitive global economy, alongside new approaches to open government, education and regulation.

[Not Rocket Science: A Roadmap for Arts and Cultural R&D](#) **(Hasan Bakhshi, Radhika Desai and Alan Freeman, 2009)**

The report makes the case that arts and cultural organizations should engage in R&D and receive public funding to do so. Bakhshi et al. acknowledge that the role of R&D in the arts is limited by definitions of R&D which privilege science and technology but exclude the arts and humanities. For this reason, arts and cultural R&D must adopt practices from the sciences such as clear research questions and the investment of substantial time and money. The report frames innovation as the social application of new ideas and argues that since arts and cultural organizations already generate public value and receive public funding they are well-positioned to conduct R&D. Moreover, public support for R&D demands that the results of research must also be shared publicly. The report concludes with ten parameters that aim to make R&D a core activity of publicly funded arts and cultural organizations.

[Scotland's Digital Future: A Strategy for Scotland](#) **(Scottish Government, 2011)**

The report provides a detailed discussion of how to achieve the Scottish Government's ambition of next generation broadband access to all by 2020. The strategy focuses on four key areas: public service delivery, digital economy, digital participation and broadband connectivity. The section on public service delivery mentions the importance of digitization to access cultural content however the focus is

on existing examples rather than future goals or targeted actions. Ultimately, the strategy does not address how artistic expression or cultural organizations contribute to Scotland's digital ambition.

[The New Art of Finance: Making Money Work Harder for the Arts](#) (Nesta, 2014)

The report uses eight case studies from the UK and Australia to explore how both public and private funding can have a greater impact on arts organizations. The report starts by establishing that although the arts are increasingly relevant to economic growth, funding models have not evolved to reflect this reality. As a result, Nesta proposes several strategies to make financial support for the arts "work harder." First, five years after the publication of It's Not Rocket Science, the report reiterates the importance of R&D to arts and cultural organizations. It acknowledges that although innovation in terms of artistic expression is already supported, there is potential to fund new forms of audience engagement and business models. Second, the report discusses the need for venture funds and accelerators. While grant contracts could include the conversion of public funding into investment shares for projects with commercial potential, accelerators would enable third party investment in nonprofit arts and cultural activities. Third, the report weighs the opportunities and challenges of funding models that would match crowdfunding. The report concludes that public art funders should invest 1% of their budget in R&D and that both public and private funders should pilot venture funds, accelerators and matched-funding crowd funding.

[Unlocking Potential Embracing Ambition: 2014-2024](#) (Creative Scotland, 2014)

This strategic plan outlines Creative Scotland's ambitions and priorities for the ten-year period between 2014 and 2024. Digital is one of the four connecting themes that underpin the plan. As a result, arts and culture organizations must discuss their work in digital as part of funding applications, evaluations and reviews for Creative Scotland. Future goals for digital in arts and culture include the development of a film and screen strategy, support to stream place-based work and encouragement of documentation and digitization of the activities of funded organizations. Creative Scotland also frames digital as having an important role to play in the collection of data, which will in turn strengthen the way that technology is applied to the arts. Ultimately, digital complements the plan's other three connecting themes of creative learning, equalities and diversities and environment and confirms the importance of arts and culture to the economic and social wellbeing of Scotland.

[Creative Media Policy](#) (Arts Council England, 2015)

This policy responds to the rise of internet use across multiple platforms, especially among young people, and encompasses all artforms and aspects of Arts Council England (ACE). The policy builds on previous programs to support digital media such as The Space (in partnership with BBC and BFI) and the digital R&D fund for the arts and culture (in partnership with Nesta and the Arts and Humanities Research Council). ACE outlines nine areas which must be developed in order to increase the quality, volume and reach of digital media content produced by funded organizations. They are: skills and training; talent development; media production; digital exhibition and distribution; archives and collections; data and metadata; rights and intellectual property; audience engagement and learning; and, business models and organizational development. ACE commits to taking action in these nine areas in several ways. First, the policy introduces a KPI to "increase work made available digitally" among funded organizations. Second, the policy lists partners to work with in future activities to support the development of creative media. Third, ACE confirms that investment mechanisms, primarily grants, will continue to be used to fund digital innovation. The policy concludes by listing other forms of ACE investment that relate to creative media such as the Audience Focus fund and the Strategic Touring program. In effect, the policy establishes that increasing digital creativity involves all

of ACE's activities and requires renewed partnership with a variety of both local and national organizations.

[Digital R&D Fund for the Arts: Evaluation](#) (Tom Fleming Creative Consultancy, 2016)

The evaluation examines the Digital R&D Fund for the Arts, a partnership between Nesta, Arts Council England and the Arts and Humanities Research Council. The fund provided a total of £7 million to 52 project over five rounds of funding between 2012 and 2015. The projects had budgets of between £42,000 and £300,000 and aimed to facilitate collaboration between arts organizations, technology providers and researchers. The evaluation found that the fund had six primary outcomes. First, the fund contributed to audience engagement in the short-term by reaching new groups as well as in the medium-term by strengthening relationships with existing audience members. The second outcome was new business models and mechanisms to generate income. The third outcome was increased collaboration to support innovation, encompassing both a deeper understanding of three-way collaborations and a greater number of collaborations pursued. The fourth outcome was a cultural shift in funded organizations towards embedding digital within arts practices and embracing projects that span multiple sectors. The fifth outcome was increased digital capacity in arts and cultural organizations. The final outcome was a new body of research on R&D in the arts sector that improves the knowledge base among policymakers, arts practitioners and investors. The evaluation concluded that although the R&D fund increased capacity for and awareness of the role of digital in the arts, organizations struggle to convert innovation into new business models that diversify revenue and encourage the monetization of artistic activities.

[Digital Culture: How the Digital R&D Fund for the Arts impacted the arts and cultural sector](#) (2016)

The report provides a quantitative analysis of the impact of the Digital R&D Fund for the Arts on both funded participants and other arts organizations. The evaluation is based on a survey that tracked the use of digital technology in the arts and cultural sector over a three-year period as well as additional questions for organizations that received R&D funding. The analysis found that organizations that participated in the fund were more active and sophisticated in their use of digital technology than other organizations. Moreover, over the course of the three-year study, the gap in digital capabilities between funded and non-funded organizations widened, especially in terms of innovative approaches to distribution. However, dance and visual arts organizations experienced more benefits from the fund than music and heritage organizations. In addition, Arts Council England's National Portfolio Organizations were disproportionately represented among organizations who reported a positive impact from engaging with the fund. This suggests that larger organizations were better positioned to take advantage of the opportunities presented by R&D. Overall, the report found that the Digital R&D Fund for the Arts had a positive impact on organizations that received funding as well as influencing attitudes towards digital technology in the arts and cultural sector more broadly.

[State of the Art: Analysing where art meets technology using social network data](#) (Nesta, 2016)

The report analyses data from the social networking platform Meetup.com in order to understand the intersections of art and technology pursued by people from different disciplines in different parts of the England. The report is premised on the idea that technology has an economic as well as aesthetic impact on art making. It finds that there is an uneven geographic distribution of meetups focused on art and digital technology, with more activities in London than all other cities combined. The report suggests that interactions between art and technology may be more likely in larger cities that are home to many people with different skillsets. Despite this, makerspaces are significant hubs of innovation in communities of all sizes. The report also finds that the use of new technology is more

limited in the fine arts than in other forms of creative expression. The report concludes by noting the importance of personalization to technologies used by meetups and suggests that features to support user feedback and co-creation will only become more important in the future.

United States

[Arts Organizations and Digital Technologies](#) (Pew Research Centre, 2013)

The report analyzes a survey of more than 1,200 nonprofit arts organizations who received funding from the National Endowment for the Arts between 2006 and 2011. The organizations span literary arts, cinema, heritage and visual arts but the majority of respondents identify as performing arts groups or arts service organizations. The study finds that digital technology is widely employed in the nonprofit arts sector both to produce and to promote art works across multiple platforms. Online tools play an important role in every stage of the creative process, from applying for funding to collaborating between artists and engaging audiences before, during and after and event or exhibit. Respondents discussed numerous positive impacts of digital technology but they also expressed concern about the amount of time and effort to maintain an online presence. Moreover, some organizations indicated that they could benefit from further funding to invest in equipment and upgrade the skills of staff. Other concerns included the impact of digital technology on audience attention and in-person attendance, despite the growing potential for online engagement with art. Finally, the report also reveals that new technologies have changed ideas of what art is and how it should be accessed. Specifically, arts organizations reported an expectation that digital content should be free, an idea which reduces barriers to access but also challenges existing business models.

[Like, Link, Share: How cultural institutions are embracing digital technology](#) (Wyncote Foundation, 2014)

The Wyncote Foundation commissioned a report on how arts organizations are adjusting to emerging technologies. The report focuses on legacy cultural institutions that have been around for decades, benefited from significant public and private investment and are not founder-led. Specifically, the report investigates 40 American arts organizations using a combination of visits, interviews and desk research. The report's findings are grouped into five themes. First, the report reveals that digital engagement must be driven by a digital strategy that is embedded in a larger vision for the organization and also shapes future measurement and evaluation of arts activities. Second, best results come from funding capacity building rather than standalone projects. Third, organizational structures are in flux and must adapt to the requirements of digital creation. The new position of Chief Digital Officer demonstrates the evolution of governance and administration. Fourth, digital technology is vital to meeting the expectations of audiences and enabling interacting events and exhibits. However, intellectual property rights prevent digital sharing of some art forms. Finally, the report emphasizes the need for new business models since revenue from traditional practices is in decline but revenue from digital activities has not caught up. The report concludes that the successful integration of digital technology depends on strong leadership both from a committed individual and from a highly-skilled and supportive team.

[Molto + Media: Digital Culture Funding](#) (Media Impact Funders 2013)

The report profiles nine American arts organizations that demonstrate leadership in digital innovation across different art forms, geographic regions and organizational sizes. The report reveals that in the American context, philanthropists are slow to integrate digital technology and associated forms of creative expression into grants. As a result, arts organizations often use operational funding rather than grants to finance digital activities. The report identifies several themes that unite diverse

organizations and divergent artistic practices. First, organizations focus on building digital skills rather than completing individual projects. Second, organizations want funders to recognize past successes with larger grants, especially given the cost of digital technology. Third, organizations also highlight the need for funding to support risk taking, with the understanding that not all undertakings will succeed. The idea of risk taking draws on the experiences of the tech industry, where many projects fail, and evokes Nesta's call for digital R&D in the arts. Finally, the report asserts that digital technology has the ability to go both deep and wide in terms of both broadening audience engagement and targeting specialized, niche audiences. Ultimately, the report concludes that energy and creativity enable committed arts organizations to pursue digital innovation despite outdated funding models that do not recognize the challenges and opportunities presented by digital technology.

A.3 Programs to Support Digital Technology in the Arts

Australia

Name:		Funder:	
MATCH Program		Creative Partnerships Australia	
Jurisdiction		**Partners:**	
Australia (national)		n/a	
Objectives:			
1) Grow private sector revenue streams 2) Creative effective crowdfunding campaigns 3) Develop fundraising skills 4) Increase investment from existing networks 5) Connect and create relationships with new donors and supporters 6) Build awareness of work and attract new audiences.			
Total Funding Available:		**Funding per Project:**	
Unlisted.		Crowdfunding matched to a maximum of $10,000.	
Applicant Eligibility:		**Project Eligibility:**	
Practicing artists or arts groups who organize a crowdfunding campaign. Artists must be Australian citizens. Arts organizations are not eligible.		Crowdfunding campaigns organized between February and May 2016. The program will not match funds from bequests, loans, government funding or in-kind support.	
Relevance to Literature Review:			
Building capacity for more successful crowdfunding campaigns.			

Canada

Name:		Funder:	
Micro-Budget Production Program		Telefilm Canada	
Jurisdiction		**Partners:**	
Canada (national)		n/a	

Objectives:	
1) Stimulate the use of new digital distribution platforms and increase audience access to the works of new Canadian talent 2) Encourage and support emerging Canadian filmmakers 3) Encourage innovation and creativity at all stages of the development, production, distribution and promotion processes 4) Increase the public's access to Aboriginal and OLMC content through innovative distribution channels.	
Total Funding Available:	**Funding per Project:**
Unlisted.	$7,500
Applicant Eligibility:	**Project Eligibility:**
Applicants must be invited to apply.	Narrative-based projects of 10-74 minutes from first-time web creators.
Relevance to Literature Review:	
Support for artists who are new to digital distribution.	

Name:	Funder:
Collaboration and Innovation Fund	Ontario Media Development Corporation
Jurisdiction	**Partners:**
Canada (ON)	n/a
Objectives:	
1) Respond to new business opportunities which cross sectors, platforms and/or involve non-traditional partnerships 2) Meet the challenges and opportunities of the digital economy by exploring new value propositions alongside current state-state business models 3) Transform innovative and entrepreneurial ideas into goods and services, to drive growth and productivity.	
Total Funding Available:	**Funding per Project:**
Unlisted.	Up to $7,500 for development and up to $150,000 for implementation.
Applicant Eligibility:	**Project Eligibility:**
Ontario-based, majority Canadian-owned and -controlled, previous successful recipient of OMDC funding.	New business concepts and strategies that support the development, production and exploitation of intellectual property.
Relevance to Literature Review:	
Responds to the blending of content across sectors and platforms and need for new business models. This example focuses on the creative industries but similar issues are facing the arts sector.	

Name:	Funder:
Arts Innovation Fund	Creative BC
Jurisdiction	**Partners:**

Canada (BC)		BC Arts Council	
Objectives:			
Encourage nonprofit arts and culture organizations to collaborate with digital media creators on projects that engage audiences in new and innovative ways.			
Total Funding Available:		**Funding per Project:**	
Unlisted.		Up to $25,000.	
Applicant Eligibility:		**Project Eligibility:**	
Nonprofit organization that has received support from BC Arts Council within the past two years.		Projects must be digital with a focus on interactivity and intended for delivery on a digital platform. Priority given to projects suitable for commercial exploitation.	
Relevance to Literature Review:			
Incentivizes partnerships between fine arts and technology.			

Name:		**Funder:**	
Mesure d'aide à la création et au développement de contenus culturels numériques originaux		CALQ	
Jurisdiction		**Partners:**	
Canada (Quebec)		n/a	
Objectives:			
1) Ensure the ongoing influence of Quebec culture 2) Encourage the creation and development of original digital cultural content 3) Support artists in their efforts to integration new tools into their creative practices.			
Total Funding Available:		**Funding per Project:**	
Unlisted.		Maximum $50,000 per project	
Applicant Eligibility:		**Project Eligibility:**	
Writers or artists who are Canadian citizens or permanent residents and reside in Quebec. Must have a proven track record of artistic creation in their discipline.		Unlisted.	
Relevance to Literature Review:			
Program is a direct outcome of the Plan culturel numérique du Québec.			
Name:		**Funder:**	
Mesure d'aide à la numérisation de contenus artistiques et littéraires et au déploiement d'infrastructures numériques		CALQ	
Jurisdiction		**Partners:**	
Canada (national)		n/a	

Objectives:	
1) Digitization: convert creative content in formats that can be shared online 2) Digital Infrastructure: acquire, develop, update, maintain and share software and equipment that contribute to operating activities.	
Total Funding Available:	Funding per Project:
$2.4million.	Unlisted. 42 organizations received funding.
Applicant Eligibility:	Project Eligibility:
Writers or artists who are Canadian citizens or permanent residents and reside in Quebec. Must have a proven track record of artistic creation in their discipline.	Unlisted.
Relevance to Literature Review:	
Program is a direct outcome of the Plan culturel numérique du Québec.	

Name:	Funder:
Scènes ouvertes	Société des arts technologiques
Jurisdiction	Partners:
Canada (Quebec)	n/a
Objectives:	
Redefine the cultural geography of Quebec. Encourage innovative approaches to telecommuting and online collaboration.	
Total Funding Available:	Funding per Project:
n/a	n/a
Applicant Eligibility:	Project Eligibility:
Rural, remote and Indigenous communities throughout Quebec.	Each community is equipped with Scenic 2 software, a program designed on an open source model to encourage innovation in telecommuting, online collaboration and networked artistic practices.
Relevance to Literature Review:	
Result a partnership between SAT and Plan culturel numérique du Québec.	

France

Name:	Funder:
Dispositif pour la création artistique multimédia et numérique (DICRéAM)	Centre national du cinéma et de l'image animé

Jurisdiction		Partners:	
France (national)		Direction générale de la création artistique, Secrétariat général, Délégation générale à la langue française et aux langues de France, Centre national du livre	

Objectives:

Support for development, production and diffusion.

Total Funding Available:		Funding per Project:	
Unlisted. 70% of total budget provided by CNC.		Development: 75% of cost; Production: 50% of costs; Dissemination: 50% of costs to a max of €10,000.	

Applicant Eligibility:		Project Eligibility:	
Individual artists or organizations based in France.		Physical or digital dissemination of a specific project or the presentation of an art work for the first time.	

Relevance to Literature Review:

Aims to support experimental work, especially the use of digital and multimedia technology in the creation process.

Name:		Funder:	
Objectif Croissance		Imaginove Content Cluster	

Jurisdiction		Partners:	
France (Rhône-Alpes)		n/a	

Objectives:

Assist businesses to meet growth targets.

Total Funding Available:		Funding per Project:	
Project budget of 100,000 per year.		Unlisted. Imaginove also assists participating businesses to find funding from other sources.	

Applicant Eligibility:		Project Eligibility:	
Members of Imaginove working in film, television, multimedia and video games. 5 new businesses are selected per year.		Specific growth targets that can be achieved over a three-year period. Past examples include: launching a new product, entering a new market, developing a network or fundraising.	

Relevance to Literature Review:

Connects the digital media enterprises to public services and private enterprises using new technologies and creative digital content.

Name:		Funder:	
Fonds de soutien à la création artistique numérique (Fonds SCAN)		Region Rhône-Alpes	
Jurisdiction		Partners:	
France (Rhône-Alpes)		n/a	
Objectives:			
Funding for research, experimentation and creation of creative digital content in the Rhône-Alpes Region.			
Total Funding Available:		Funding per Project:	
Unlisted.		50% of total project budget to a maximum of €25,000.	
Applicant Eligibility:		Project Eligibility:	
Individual artists or organizations based in Rhône-Alpes. Students leading multidisciplinary collective projects with professional support.		Projects must use digital techniques and work in partnership with another institution such as a broadcaster, research centre etc. The results of the project must also be publicly available.	
Relevance to Literature Review:			
Support for artists who are new to digital distribution.			

United Kingdom

Name:		Funder:	
Digital R&D Fund for the Arts		Nesta	
Jurisdiction		Partners:	
UK (England, as well as parallel projects in Scotland and Wales)		Arts Council England, Arts and Humanities Research Council	
Objectives:			
1) Expand audience reach and engagement 2) Explore new business models.			
Total Funding Available:		Funding per Project:	
£7 million		up to £300,000	
Applicant Eligibility:		Project Eligibility:	
Organizations in England.		Marketing, preserving and archiving, operations, distribution and exhibition, creation, business models.	
Relevance to Literature Review:			

Encourage application of digital technology to audience engagement and new business models. Innovative approach to eligibility, any organization undertaking arts projects can apply, rather than focusing on art organizations specifically.	

Name:	Funder:
Open Project Funding	Creative Scotland
Jurisdiction	Partners:
UK (Scotland)	n/a
Objectives:	
1) Develop skills or artistic practice 2) Projects that create something new and of high quality 3) Develop and reach new audiences 4) Encourage more people to get involved in artistic and creative activity.	
Total Funding Available:	Funding per Project:
£10.5 million.	up to £150,000.
Applicant Eligibility:	Project Eligibility:
Artists, creative practitioners and collaborations or organizations based in Scotland. Students, academics and other educational professionals are not eligible.	The funding mechanism supports projects that: develop skills or artistic practice; create something new and of high quality; present work to audiences or try to develop and reach new audiences; encourage more people to get involved in artistic and creative activity.
Relevance to Literature Review:	
Flexible funding model encourages collaboration and supports skill development.	
Name:	Funder:
The Space	BBC
Jurisdiction	Partners:
UK (England)	Arts Council England
Objectives:	
1) Commissioning: capture great live performances, extend existing arts experiences using technology or are built with digital at the heart 2) Resources: guides to the use of digital technology at every phase in the creative process.	
Total Funding Available:	Funding per Project:
Unlisted.	Unlisted.
Applicant Eligibility:	Project Eligibility:
Artists and organizations based in the UK.	Projects across all art forms that use digital technologies to pursue artistic excellence and reach new audiences.
Relevance to Literature Review:	

Focus on audience development using digital technology regardless of art form.

Name:		Funder:	
Funding for National Portfolio Organizations		Arts Council England	
Jurisdiction		Partners:	
UK (England)		n/a	
Objectives:			
Three-year funding for arts organizations.			
Total Funding Available:		Funding per Project:	
£1 billion over 3 years.		Unlisted 663 organizations funded.	
Applicant Eligibility:		Project Eligibility:	
Arts organizations in England.		Projects that help more people engage with arts and culture and create opportunities for young people while also demonstrating artistic excellence.	
Relevance to Literature Review:			
Sustained funding enables engagement with and investment in digital technology.			

Name:		Funder:	
Capital Funding		Arts Council England	
Jurisdiction		Partners:	
UK (England)		n/a	
Objectives:			
Support for arts organizations to become more sustainable and innovative, including improving environmental performance and increasing digital connectivity.			
Total Funding Available:		Funding per Project:	
£88 million.		Unlisted, 16 successful applicants.	
Applicant Eligibility:		Project Eligibility:	
Recipients of National portfolio funding.		Funding focuses on the consolidation and improvement of existing arts infrastructure.	
Relevance to Literature Review:			
Capital funding used to further develop digital infrastructure in the arts sector and to support the quality, volume and reach of digital content.			

Name:		Funder:	
Regularly Funded Agencies		Creative Scotland	
Jurisdiction		Partners:	

UK (Scotland)	n/a

Objectives:	
1) Increase the geographical spread of organizations supported by Creative Scotland 2) Reinforce the connecting themes of creating learning, equalities and diversity, digital and environment introduced in the strategic plan.	

Total Funding Available:	Funding per Project:
100m over 3 years.	119 organizations funded.

Applicant Eligibility:	Project Eligibility:
Artists, creative practitioners and collaborations or organizations based in Scotland. Students, academics and other educational professionals are not eligible.	Applications evaluated on the basis of: excellence and experimentation, accessing and enjoying creative experiences, financial viability, governance and management.

Relevance to Literature Review:	
The largest segment of organizations in the regular funding portfolio for 2015-18 work across multiple artistic disciplines, suggesting that regular funding encourages innovation.	

Name:	Funder:
Time to Shine Digital	Creative Scotland

Jurisdiction	Partners:
UK (Scotland)	n/a

Objectives:	
Inspire digital creativity and experimentation in young people through a series of youth-led projects working with arts organisations in collaboration with technology partners.	

Total Funding Available:	Funding per Project:
£401,444	£50,000-£100,000 each for six agencies.

Applicant Eligibility:	Project Eligibility:
Youth Arts Agencies in Scotland.	Youth-led digital arts and cultural projects that create partnerships with stakeholders working in interactive media.

Relevance to Literature Review:	
Example of encouraging partnerships between arts organizations and technology companies. Role of digital within larger arts strategies, in this case Scotland's national youth arts strategy.	