



Department for
Digital, Culture
Media & Sport

Culture is Digital June 2019 Progress Report



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Foreword

By Jeremy Wright, Secretary of State for Digital, Culture, Media and Sport



As I set out in my Value of Culture speech: culture matters; it matters to us as individuals, as communities and as a Nation. The UK is renowned for its cultural and creative excellence and there is a growing demand for British content all around the world.

In the UK there are over 48 million internet users and [Ofcom reports](#) that the average Briton spends 24 hours a week online, with 62% of that time on a smartphone. Digital activity is increasingly becoming the new ordinary, playing a huge role in both how we connect with each other and with the world around us. The use of digital technology within the cultural sector has led to an increasingly integrated landscape of creative activity and unlocked new forms of artistic expression, methods of distribution and audiences.

But this is not a one-way relationship: culture transforms and is transformed by new technology. From the [National Theatre's Draw Me Close](#) VR experience to the [development of AI through videogames](#), culture grows alongside technological advancements to dream of new methods of use and to ask how we as a society should relate to them. As evidenced throughout this report, next generation companies working in spheres like immersive technology are seeking out cultural and creative partners to test the limits of their technology and create new experiences for audiences.

In this document I am able to outline the progress we have made on implementing #CultureisDigital. When DCMS published the initial report, it found evidence of a culture sector facing a number of barriers to greater digital adoption, such as skills, literacy, fragmentation or funding; but also a sector with the energy and drive to generate new solutions to these barriers and tackle them collaboratively. This document tells the story of this collaboration and highlights the tools, techniques and opportunities to help the sector build its digital literacy, embrace new opportunities and inform new technologies in the digital world.

My thanks go to the many individuals, organisations and advisors from across the cultural and tech sectors, whose energy, ingenuity and expertise meant Culture is Digital became a reality. I am also very grateful to the many commitment holders whose ongoing leadership in the Digital Culture space makes me believe that we are only at the beginning of our work together, with a long and exciting journey ahead of us. In no particular order, they are:

Owen Hopkin, Nicola Saunders, Tonya Nelson, Ben Lane, Carl Stevens, Tiina Hill and Paul Glinkowski, Arts Council England

Tom Steinberg, the National Lottery Heritage Fund

Valerie Johnson and Susannah Baccardax, The National Archives and all the Taskforce members.

Cimeon Ellerton, The Audience Agency

Fiona Morris and John White, the Space

Sally Long, Laura Phillips and Margaret Haig, the Intellectual Property Office

Annette Mees, the Royal Opera House

Chris Michaels, The National Gallery

Sarah Ellis, Royal Shakespeare Company

Lamia Dabboussy, BBC Arts

Anthony Lilley, Andrew Chitty, Kristine Zaidi, Arts and Humanities Research Council

Hassan Bhakshi and Francesca Sanderson, Nesta

Executive Summary

The UK is one of the most exciting cultural destinations in the world; boasting world class museums and galleries, with the British Museum, The National Gallery, Tate Modern and V&A in the top ten most visited art museums in the world. The c.3,000 libraries on high streets and in communities across Great Britain provide a range of services to meet the needs of local people. The creative industries and digital sector contributed over £101 billion and £130.5 billion GVA in 2017 respectively and from Saatchi & Saatchi to Improbable, UK companies are known around the world for their creative excellence and technological brilliance.

The Digital Culture Project has been about bringing these success stories together, aiming to explore how culture and technology can work together to the benefit of each other. Born out of the Culture White Paper, the #CultureisDigital online consultation was launched in April 2017. Through this exercise we heard clear messages about the opportunities and challenges in digital culture as well as the ask from all parties for leadership, coordination and infrastructure. Ultimately this culminated in the publication of the 2018 [Culture is Digital Report](#) which contained research, evidence and commitments across three key themes: Audiences, Skills and Digital Capability, and Future Strategy.

We are now in the implementation stage of Culture is Digital and this document charts the progress that has been made in partnership with the commitment holders as well as opportunities for future development.

On Audiences the report noted that the collection, analysis and sharing of audience data would allow organisations to develop a more informed and responsive approach with both existing and new audiences. Since then:

- applicants to the Cultural Development Fund were encouraged to include digital engagement as part of their place-based strategies. In particular, **Plymouth will receive £3.5 million to develop the use of immersive and digital technologies** and bring to life the cultural programme to mark the 400th anniversary of the Mayflower ship's pioneering voyage
- the Arts Council have made it a mandatory requirement for all National Portfolio Organisations in the 2018-22 portfolio to contribute to [Audience Finder](#) and are continuing to invest in tools like the Impact and Insight Toolkit
- the National Lottery Heritage Fund are embedding skills development on the use of audience data within multiple workstreams as part of its new £1 million Digital Campaign (see below).

On Digital Skills and capability the report noted skills gaps in the sector, such as data analysis and intellectual property knowledge, and highlighted the benefit of increasing digital skills and maturity. Since then:

- **the Arts Council have launched their new £1.1 million Digital Culture network**, a two-year initiative to increase the digital skills and capacity of arts and cultural

organisations, providing practical hands-on support, developing partnerships with the technology sector and facilitating the sharing of resources and best practice.

- **DCMS have provided £200,000 to support the creation of a new Digital Culture Code and a Digital Maturity Index**, a tool being developed by the Arts Council and National Lottery Heritage Fund in partnership for the benefit of the whole culture sector
- **the National Lottery Heritage Fund is embarking on a new £1 million campaign to build digital capability in the heritage sector**. Over the next two years they will invest in new projects and learning opportunities that target heritage organisations that lack digital skills and confidence
- **the Intellectual Property Office have delivered six free training seminars on intellectual property** attracting over 100 organisations from across the culture sector
- **the Space have worked with the sector to develop and agree a new IP rights terminology** to make the contracting of contributors, creators and existing rights-holders easier and more standardised.

On Future Strategy the report highlighted the UK's competitive advantage in digital and cultural sectors and how, through greater coordination in areas like Research and Development (R&D) and use of online heritage collections, the UK could lead the way in creating new art and cultural experiences with technology. Since then:

- the National Archives launched their online collections taskforce in 2018, bringing together leaders from across the heritage sector. **The taskforce is launching online resources** that look at the issues organisations need to consider before digitising collections
- working with technology innovator, Magic Leap, the Royal Shakespeare Company have launched an exciting **Fellowships programme**. Each Fellow will benefit from a year's long programme, including a week residency at Magic Leap exploring their technology, skills and expertise, and with the RSC working alongside their creative teams
- **the National Gallery are launching their new innovation space, National Gallery X in the Summer of 2019**. This space, will house a range of activity, leading with a collaborative R&D project with King's College London
- **the Royal Opera House have launched the 'Audience Labs'**, an exciting programme of experimental activity looking to explore Opera and Ballet away from the stage using cutting-edge technology.

Audiences

Data

In the UK there are 48 million internet users, making digital experiences part of daily life. [Ofcom](#) reports that the average Briton spends 24 hours a week online with 62% of that time on a smartphone. According to the [DCMS Taking Part survey](#) 90% of adults in 2018 were recent internet users with 30.6% of adults having digitally participated in culture in the 12 months prior to interview. Our [15 sponsored museums](#) received over 47 million physical visitors in 2017/18 and over 114 million unique visits to their websites. In 2017/18 [The National Theatre](#) had 8 million people engage through digital channels, with 60% of state secondary schools signing up to use of On Demand in Schools, their free production streaming service.

The Culture is Digital (CiD) report highlighted how the collection, analysis and sharing of audience data can allow organisations to develop a more informed and responsive approach with both existing and new audiences. The report also recognised the under-representation from Black, minority ethnic and disabled people, and lower socio-economic groups for many of the cultural sectors and emphasised how digital communications and data tools can support efforts around audience diversity in combination with the provision of cultural content and experiences.

Commitments:

- Arts Council England and the Heritage Lottery Fund (*now the National Lottery Heritage Fund*) will ensure that funded organisations get better at collecting, using and sharing audience data, including:
 - Collecting and understanding data on the reach and impact of their digital and nondigital work and using it to drive their audience engagement strategies ensuring it is done on a consistent basis across the arts and heritage sector;
 - Encouraging the use of integrated databases, such as Audience Finder, and the sharing of audience insight research, so that all businesses in the sector can better understand digital and physical audiences
- The Space and The Audience Agency will work with arts and cultural organisations, Nesta, the BBC and other content publishers and partners to develop a metrics framework and best practice guidance for arts and cultural organisations to use when planning and assessing audience engagement across different digital platforms.

Collecting, Using and Sharing Audience Data

Arts Council England (ACE) is currently consulting on its ten year strategy, in which supporting artists and arts organisations in using digital technologies to create new types of content; reach new audiences; and build data driven businesses will be an important part.

With three newly appointed Directors focusing on digital innovation, ACE aims to ensure new technologies are fully leveraged to enable creativity and cultural engagement to flourish across the UK.

The Government expects the cultural sectors to represent our diverse society, in part through the audiences they attract. ACE invests £750,000 per year in Audience Finder, a national data driven tool that helps the sector better understand audience behaviours, motivations, experiences and demographics. Audience Finder provides useful data and tools to inform audience development activity and help increase and diversify audiences, and will enable Arts Council to report on the demographic profile of audiences across the National Portfolio as part of their annual report; [“Equality, Diversity and the Creative Case”](#). **ACE made it a mandatory requirement for all National Portfolio Organisations (NPOs) in the 2018-22 portfolio to contribute to Audience Finder by January 2019** and it has been actively consulting, monitoring and supporting arts organisations, in partnership with The Audience Agency, to help ensure they use Audience Finder effectively.

ACE also invests £575,000 per year in the Impact and Insight Toolkit, a national data driven tool that helps the sector evaluate the impact of their work on the people who experience it. The toolkit builds on the audience data organisations are already getting from Audience Finder by providing additional information around what people think about different types of work and how this compares with the organisation or artists creative intentions. ACE launched the Impact and Insight Toolkit in October 2018, and despite only being a mandatory requirement for the 256 NPOs in Band 2 and 3, 337 NPOs are signed up with around 200 also choosing to participate in developing the toolkit over the next three years.

Both of these tools, combined with the support programmes attached to them, enable organisations in the sector to collect and share consistent and benchmarkable audience data that can be used for a wide range of purposes from audience development and programming to marketing and communications.

The National Lottery Heritage Fund (NLHF) announced in their new [strategic funding framework](#) that they would be ‘supporting organisations to embed digital thinking in every project to ensure that they can take full advantage of new technology to conserve heritage and to make it more inclusive’. To ensure that funded organisations get better at collecting, using and sharing audience data NLHF will develop and incorporate new guidance into several strands of its digital skills development funding (further outlined below). To lead on this work they took on a new Digital Lead, with a remit to drive change across all aspects of the way that digital interacts with NLHF as a funder.

In April 2019, NLHF also released its first batch of [Open Data](#) on the grants they awarded during their fourth Strategic Funding Framework (2013-14 to 2018-19). This is part of an ongoing commitment on transparency, ensuring that the data that NLHF collects and holds can be usable, integrated and fully accessible. There are many benefits and use cases of making grant funding data open and available including encouraging participation by ensuring applicants are more informed about decision-making, as well as allowing policy

makers to better understand funding trends and the level and variety of heritage-related activity across the UK.



National Lottery good causes exhibition. National Lottery Heritage Fund.

Audience Metrics Framework

The Audience Agency, working with the BBC and The Space, are developing a new Digital Audience Metrics framework for the sector to use when planning and assessing audience engagement across different digital platforms. In developing the tool, the group has drawn upon its knowledge, understanding and experience of developing audiences digitally, and consulted other commitment holders and sector specialists, such as Nesta and Culture 24, to support the design of the framework.

The Audience Agency's recent Innovate UK Design Thinking project [Services for Data Haters](#) provided quantitative and qualitative research into sector experiences of using analytics tools. This data allowed The Audience Agency to develop a framework concept to meet the key needs of being:

- widely relevant to what is a broad arts, culture and heritage sector;
- easy to use for a varied range of skills and experience levels;
- context specific to the particular objective or objectives of a user.

The tool is based on a prioritisation and scoring algorithm that identifies appropriate measures for a given objective. This is based on the availability/priority of a given content type and/or digital engagement channel as defined by the user. The group believes this user-defined approach will provide the best solution to enabling the discovery of the most appropriate guidance, rather than a potentially overwhelming directory of digital metrics. A

challenge for any solution going forward is the maintenance of the framework as digital platforms change rapidly.

Following the testing of the metrics framework itself, the user experience (UX) design and testing will be taking place over the coming quarter. The Audience Agency and The Space, as partners on the delivery of the Digital Maturity Index (further described below), will ensure that the framework aligns with this much broader tool. Currently in prototype stage, The Audience Agency hope to find a home for the Digital Audience Metrics tool within their wider suite of audience analytics capability for the sector. The Space plans to do the same when running its workshops on audience development and as a diagnostic tool within its programme of strategic digital mentoring.

CASE STUDY: SOCIAL MEDIA



In April 2018, the Museum of English Rural Life (The MERL) transformed its profile and global reach through the success of a single tweet – an archival photograph of an Exmoor Horn aged ram, captioned ‘look at this absolute unit’. The resulting campaign has seen it become one of the world’s most successful museums on Twitter.

By the end of the month The MERL had grown its followers from 9,679 to 32,843, Impressions went from a previous average of 114,000 to 23,000,000, and engagements from 3,000 to 1,500,000 (a 49,990% increase). Within less than a year The MERL would crack 100,000 followers.

The MERL did not have a strategy for dealing with a viral tweet, but knew how to react quickly. The Museum had just finished a project upskilling staff in digital marketing, creative software and processes for planning content. With this strong grasp of both digital marketing skills and knowledge of the collections, the Museum reacted by interacting with and talking to as many people as possible, creating weird new content to keep them interested, writing blogs on livestock genetics and even selling some t-shirts. Essentially, diverse content was made to drive people down the marketing funnel. The campaign resulted in print and online press features, industry awards and booming visitor figures – including international families from the USA and New Zealand, using their one free day out of London to visit Reading because of the Twitter account.

The MERL built on the success of the campaign by crafting a strategy which plays to the strength of the Museum and its staff, which has seen it go viral four more times. The Strategy pushes the principle that social media should be a tool for the whole of the museum, but that our content needs to be adapted to what is popular on the internet and uses a single staff-member with a distinctive online voice to be the filter for our work. The MERL uses the objective-first framework to make sure digital content achieves useful objectives for the whole museum, as well as identifying key metrics for the broader goals of growing our audiences, having meaningful interactions, making useful connections, and nurturing relationships.

It takes creativity and a willingness to take risks to stand out on social media, but for the MERL it took an original voice to make it a success. It also required embracing the fact that social media should be social, and that as a museum we have to accept that a lot of people don't find our content interesting at face value – we have to adapt it to the internet to make it relevant.

The approach The MERL has taken won't work for all institutions, but at the core of making social media work is constant experimentation, trust between staff and strategy. It is also embracing digital marketing without forgetting the mission and point of what museums are for: engaging the public with our stories.

Place

Cultural sectors make a crucial contribution to the identity, regeneration, health and wellbeing of UK cities, towns and villages. These sectors also have a role in supporting regions economically, for example the title of 'UK City of Culture' and £15 million of public funding investment to Hull in 2017 enabled over 2,800 events, over 5 million visitors, 800 new jobs, and contributed an excess of £300 million to the local economy. There was increased local cultural participation, with nine out of ten residents having attended or experienced a cultural event or activity during that year. This [cultural programme](#) led to wider investment in renewable energy, healthcare, telecommunications and the area's longstanding port industries.

Digital technology and distribution methods can support UK regions by enabling new engagement with audiences locally as well as widening the impact of cultural experiences to

eyes and ears around the World. Through a mixture of media and online channels, the [Hull City of Culture](#) 2017 programme enabled a reach of almost 37.3 billion people and an advertising value equivalent of at least £450 million. Digital initiatives in particular were a contributory factor in the increased audiences experienced by the cultural sector during the course of City of Culture, with digital taking two of the three top spots for how audiences found out about events and cultural activity.

Commitments:

- In order to further broaden cultural engagement and empower communities to share their voices, view and creative content digitally, Arts Council England will ensure that its Creative People & Places programme makes use of digital communications and platforms and that any learning that emerges is shared.
- We will encourage recipients of UK City of Culture and Cultural Development Funding to include ambitions to enhance digital audience engagement in their local place-shaping and growth strategies.

Creative People and Places

ACE commissioned The Audience Agency to undertake a piece of research with all 21 of the Creative People and Places consortia to understand what digital activity they are currently engaged in, for what purpose and how they could make increased use of digital technology to further their aims. All reported using digital technology for a range of practical purposes such as marketing, communication and evaluation, albeit with differing levels of skill, confidence and success. Whilst some are making use of digital technologies within the artistic programme or participatory practice, there is room for development for others. A report will be published in Summer 2019 to ensure findings are shared as widely as possible.

Live to Digital

The CiD Report also recommended that ACE bring together a group of organisations working on Live to Digital projects to encourage collaboration and cross-working. Responding to this, ACE convened a Live to Digital sector forum in November 2018 to establish key issues and opportunities in this space, and published a [series of reports](#) and a [blog](#) that give new insights into Live to Digital work. In order to further develop this work, ACE will convene a series of themed sector workshops across England during June/July 2019 to address five key themes: the value and benefits of Live to Digital; production for Live to Digital; developing audiences through Live to Digital work; distribution options for Live to Digital work; and funding Live to Digital.

UK City of Culture

The UK City of Culture uses culture and creativity to transform and regenerate an area. As part of the bidding process, competing places are expected to build a high quality arts and cultural programme that reaches a wide variety of audiences (including through digital channels) and leads to lasting social and economic regeneration. Coventry is a 5G test bed city and as part of their plans to be City of Culture in 2021, the city is currently developing programming ideas which include: the creative application of immersive technology and

exploring how data (including audience and visitor insights) can be more effectively captured through the application of emerging technologies. Coventry will also enlist a 'Digital Curator', who will devise a series of exciting creative initiatives across the City.

Cultural Development Fund

On the 18 January 2019 we announced the recipients of the Cultural Development Fund (CDF). The CDF has been launched by the Government in association with ACE to use investment in heritage, culture and creativity as a catalyst for regeneration. In the first government investment of its kind, Grimsby, the Thames Estuary, Plymouth, Wakefield and Worcester will use the funding to strengthen the local arts sector, increase cultural access and provide greater opportunity for people to forge creative careers.

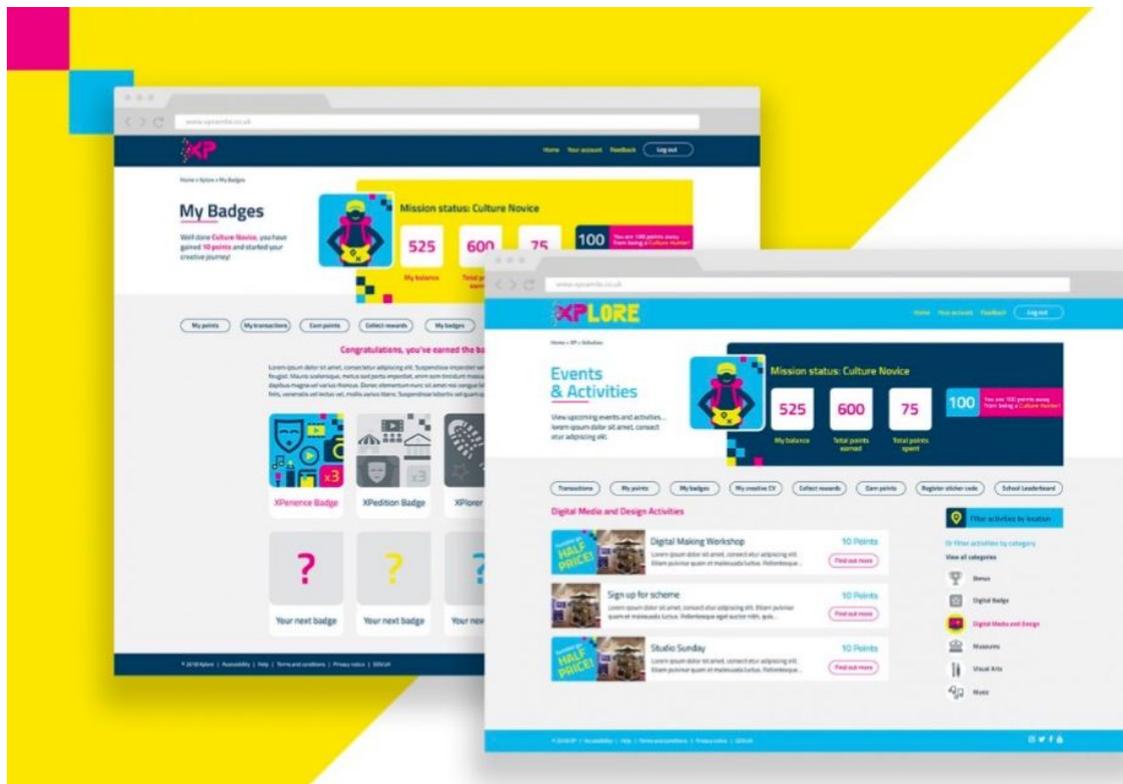
As part of the application process, participants were encouraged to look at enhancing digital audience engagement as part of the bids as well as using technology as a delivery mechanism for cultural experiences. We were delighted to see an array of bids from across the country that embraced the digital opportunity for engagement. For example Plymouth will receive £3.5 million to develop the use of immersive and digital technologies to drive growth in the local creative economy and bring to life the cultural programme to mark the 400th anniversary of the Mayflower ship's pioneering voyage.

Festival 2022

We have also announced there will be a Festival in 2022 to showcase creative and innovative strengths across Great Britain and Northern Ireland. It will deliver an exciting future-focused programme of events on arts, culture, design, tech and heritage, celebrating the strengths, values and identity of the communities and places of Great Britain and Northern Ireland.

We are in the early stages of planning the Festival, which is intended to be politically independent and delivered at arm's length from government through a delivery body. There will be key opportunities for the cultural, creative and digital sectors to partner to showcase innovative strengths in these sectors, ensure extensive and diverse engagement in the Festival and drive growth in these sectors.

CASE STUDY: PLACE AND DIVERSITY



The Cambridgeshire Culture Card scheme (now rebranded XPIRE and XP) is an ambitious project initiated by the My Cambridge Cultural Education Partnership, a cross sector partnership supporting children and young people to develop rich cultural lives that can substantially improve their life chances, both in terms of education and employment, and their overall quality of life. The project uses the arts and a place-based approach to address a range of social, economic, educational and engagement inequalities, underpinned by three core aims:

- Increase children and young people's access and participation in art, culture and creativity; particularly those from low-income backgrounds or who face inequalities of access
- Recognise and acknowledge children and young people's engagement in art, creativity and culture; and its contribution to their learning, skills and career development
- Provide robust, relevant and visible evidence of the impact of cultural engagement on children and young people on a range of outcomes

Following a detailed feasibility study, the project successfully identified that these aims could be met in a scalable and replicable way by repurposing the free library card into a universal cultural passport, developed alongside mobile technologies and a bespoke digital platform. In 2018, we developed a prototype digital platform to live test key elements of the scheme with over 250 families living in the bottom 20% of local authority areas nationally for youth and school social mobility.

The prototype digital platform supported a range of functionality including cultural engagement tracking methods; offering enhanced incentives by auto-recognition of free

school meal or pupil premium status; and gamification methods such as digital badges and reward points. At the prototype stage, the scheme successfully collected over 900 data variables including geo-demographic, cultural offer, engagement, activity preferences, educational attainment and non-academic skills, with 89% captured directly by the digital platform.

Registration to the scheme exceeded expectations in relation to both overall numbers, and the engagement by children and young people from low income backgrounds. Over a 22 week period, the digital platform recorded 171 activity and event participations by 114 individual children, with an additional 162 family members. A key test for the prototype scheme was whether it would successfully engage children and young people from low-income backgrounds, using pupil premium and free school meal eligibility as a proxy measure. The prototype proved highly successful with 43% of all children that went on to engage being in receipt of free school meals or Pupil Premium, and 52% of all primary aged children.

Digital Skills

Skills and Capability

Developing digital skills is at the forefront of the [UK's Digital Strategy](#) and the [UK's Industrial Strategy](#). These set out Government ambitions to ensure that we have the skilled and capable workforce necessary for an increasingly digital world. By 2024, the annual aggregate economic benefit of equipping individuals with Basic Digital Skills is [expected to amount to £3.3 billion](#). The 2017 Digital Culture Survey reported that 70% of organisations saw a major positive impact from digital technology on their ability to deliver their mission but the majority of organisations viewed themselves as only having basic digital skills.

Over the last 12 months, the DCMS Digital Skills Partnership has developed and launched 6 Local Digital Skills Partnerships (Local DSP) which brings together public, private and charity sector organisations, both regional and national to collaborate and help increase the digital capability of individuals and organisations regionally. Working closely with Local Enterprise Partnerships (LEPs) and Combined Authorities, Local DSPs have been established in Lancashire, Devon/Somerset, West Midlands, Cornwall and Isles of Scilly, Cheshire and Warrington and the South East which covers Kent, Essex and Sussex. Supported by a small initial grant from DCMS, all six regions have appointed a local coordinator to help build a strong network of stakeholders at a regional level and linking in industry partners and national stakeholders to support innovative digital skills programmes and initiatives.



Map showing the 6 trailblazer Local Digital Skills Partnerships

Commitments:

- Arts Council England, working with the Heritage Lottery Fund and partners, will create and pilot the use of a Digital Maturity Index for the cultural sector, to enable organisations to understand and benchmark their own digital capability and set plans in place to make improvements.
- Arts Council England, working with the Heritage Lottery Fund and partners, will work together to create a Digital Culture Code; a set of guidelines and principles which cultural organisations should sign up to in order to demonstrate a commitment to developing their own digital maturity and the maturity of the wider cultural sector.

Digital Culture Code and Maturity Index

Using funding secured from the Digital Skills Partnership, DCMS has provided £200,000 to support the creation of tools and infrastructure that implement the digital skills and maturity commitments set out in the CiD report. This funding, has supported Arts Council England (ACE) and National Lottery Heritage Fund (NLHF), in addition to their own resources, to work in partnership to create a new Digital Culture Code and a Digital Maturity Index. Both of these commitments support the increase of digital maturity across the whole cultural sector from large heritage sites to local museums and galleries.

Following scoping work by the partners, a decision was taken to deliver the two commitments together. Bringing these tools together allows the Code to articulate a broad set of guiding principles to achieving digital maturity that can be easily understood by staff and Trustees across organisations and support the development of digital strategies and plans. Positioned alongside this, the Index will be a self-help tool that will enable organisations to assess how mature they are in their use of digital technology. The design and build work are currently being undertaken by a partnership led by The Space, Culture24, The Audience Agency, University of Leicester and Creative Coop.

The Index is designed as a self-assessment process rather than a monitoring tool. It will include a standardised scale for measuring maturity, which users can apply to a range of areas and capabilities including:

- overall strategy and governance
- specific arts, cultural and heritage activities
- general activities such as digital skills development and operations.

Whilst data collected by the index will aid ACE and NLHF in understanding the digital maturity of the arts, cultural and heritage sector, the primary focus is to help organisations understand their own maturity and to focus on areas they might want to improve, depending on their wider organisational goals. Using the tool, organisations will be able to customise the Index to focus on the areas relevant to them, record the current maturity of their digital capabilities and identify their targets for improvement. The tool will be designed to enable easy exporting and sharing of data and reports, including revisiting progress in subsequent years.

The Digital Culture Code and the Digital Maturity Index will be released as a freely available online tool in Autumn 2019. The Space and partners are currently designing and testing content with a series of workshops across the country, leading to a period of beta testing in the summer.

Commitment:

- Arts Council England will set-up a Digital Culture Network, investing £1.1m over two years to create a network of expertise and sharing of best practice across each region in England in order to increase its sectors' digital skills and capability.

Digital Culture Network

This document coincides with the launch of ACE's new Digital Culture Network, a two-year initiative to increase the digital skills and capacity of arts and cultural organisations, providing practical hands on support, developing partnerships with the technology sector and facilitating the sharing of resources and best practice.



Haydn Corrodus, Tech Champion for South East, delivering an Instagram workshop at Digital Skills Masterclass at Bristol Watershed, Arts Council in partnership with Google Arts & Culture.

The network is supported by a team of nine Tech Champions recruited with specialisms in e-commerce, digital strategy, SEO/SEM, Box office systems, social media, website design,

analytics and video content production. The Tech Champions are based in each of the nine regional ACE offices to provide local assistance, but crucially work as a national cohort offering support across the country.

In its 'soft launch' phase (March-June), the network has already been contacted **by over 130 organisations wanting advice**. It also delivered a successful pilot partnership with Google Arts & Culture with two digital marketing masterclasses in Manchester and Bristol. **The events were oversubscribed within 24 hours of tickets becoming available and saw 150 attendees in total across both sites**. The Digital Culture Network is currently working with Google on a roll-out of the training programme across England as part of the network.

A presence for the Digital Network on the [Arts Council website](#) has been launched which features team profiles and a sign up page for support. A resources portal for information sheets and videos, case-studies, best practice and signposting is under development. Over the coming months, a number of launch events across England have been planned and work will continue on giving practical support to the arts and cultural sector following an excellent start.

In order to ensure the sector's alignment with cross-sectoral efforts as part of the Digital Skills Partnership we will ensure that tech leaders in the Digital Culture Network work alongside and feed into local DSPs. DCMS is ensuring that the interests of the culture sector are being represented in the Digital Skills Partnership more widely through NLHF and ACE, who are contributing members of the Charity Digital Skills Partnership and are helping to coordinate their work on CiD with that of the wider group.

National Lottery Heritage Fund Digital Capability

NLHF has made digital a key feature of their business transformation programme. Their [strategy](#) states that they 'will build digital capabilities in the sector and in our own organisation, including sharing our data openly'. They are already on the path to making this a reality, having recruited five digital service design roles to their organisation. The main purpose of these roles is to ensure that their funding is open to the widest possible group of applicants, and to ensure that any unduly difficult application processes that might disproportionately affect certain types of applicant are made easier and more welcoming. This team started to deliver user-facing improvements in April 2019 and substantial improvements will be rolled out to the end-to-end application experience over the next 12 months.



Participants getting hands-on with 3D scanning software; part of the Reimagine, Remake, Replay project, supported by The National Lottery Heritage Fund

Commitment:

- In order to build the digital capability of the sectors it supports, the National Lottery Heritage Fund will:
 - fund a £1 million campaign which will run over two years, to attract high-quality projects to build the sector's digital capacity, starting in 19/20 with a grant budget of £500,000 p.a.;
 - make digital a key feature throughout the Heritage Lottery Fund's Business Transformation programme, with a particular focus on upskilling staff.

Digital transformation at NLHF goes beyond the experience of applicants approaching the organisation online, it also covers both its specific funding initiatives, and its in-house funding skills. **As part of the commitment set out in the CiD report, NLHF has ringfenced £1 million over two years to support a series of interventions that target heritage organisations that lack digital skills and maturity.** This support will be offered through five tailored packages that reflect that different heritage organisations have different needs and start from very different places. The five include:

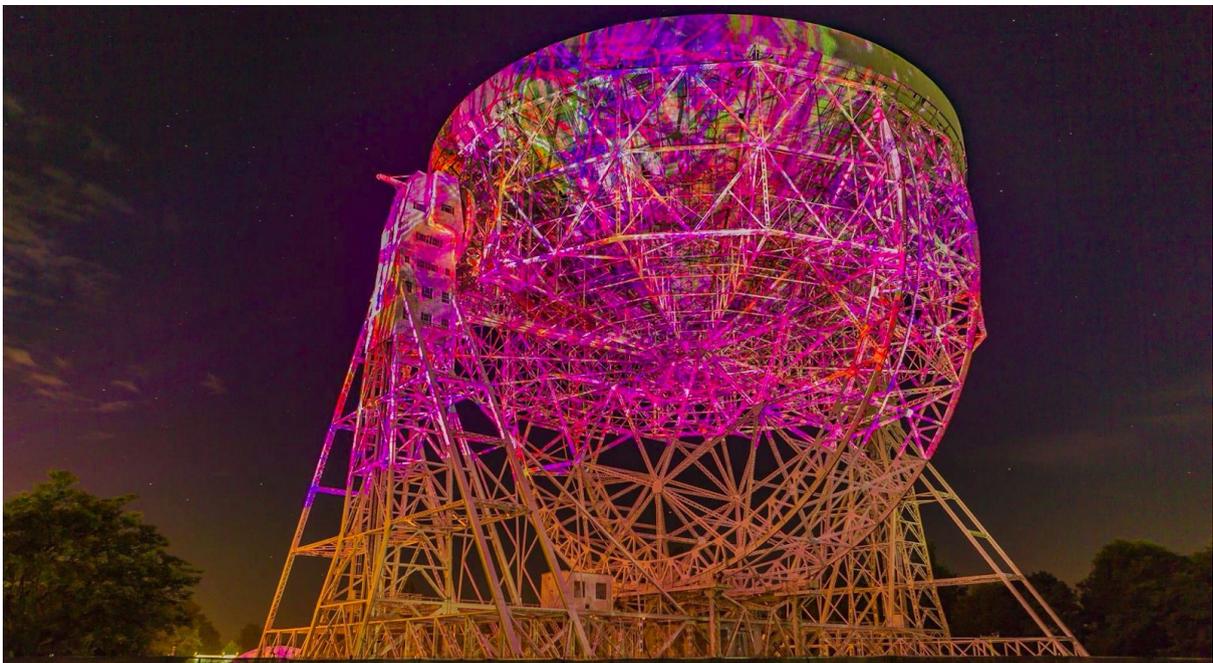
- A package that will focus on engaging heritage organisations with close-to-zero digital skills or confidence with the value that developing skills can bring. This will roll

out in late 2019, and will rely on manual outreach to organisations without a digital presence.

- A package that will focus on increasing the amount of local support for heritage organisations looking to attend classes or have one-to-one tuition on digital skills. This will also be on offer by the end of 2019.
- A package that will provide a new online resource for heritage organisations including the supply of answers to some of the most common digital questions that recur within the heritage sector – this will go live during 2020.

Following on from these interventions, there will also be two further packages of support which will be announced later in the year.

As part of this support, heritage organisations will be encouraged to use the Digital Code and Maturity index to make decisions about their level of digital maturity as it relates to their wider organisational objectives. NLHF will also work closely with the Digital Skills Partnership to ensure that local interventions are coordinated with the planning of local Digital Skills Partnerships.



Lovell Telescope at Jodrell Bank, Simon James. First Light Project. Supported by the National Lottery Heritage Fund

The Fund is also taking steps to boost its own ability to make great grants in a digital era, by investing in its own skills. This will be led by a new Head of Digital Policy, who will have a remit both to help ensure that funding policies work for a digital era, and a remit to design a whole-fund approach to ensuring that all grant-making staff are given the skills and opportunities they need to spot when digital issues within funding proposals require special analysis or handling.

Intellectual Property

The UK provides one of the very best intellectual property (IP) environments in the world and was ranked 2nd in the latest [US Chamber of Commerce Global Intellectual Property Index](#) as of February 2019. Cultural and creative organisations depend on IP for remuneration and protection of their content and there is evidence that the sector faces key challenges in exploiting IP; including lack of knowledge and legal expertise and vulnerability to losing control of their creative content online. The [Digital Culture survey](#) found that only 24% of surveyed cultural organisations feel well-served for skills relating to rights clearance, and only 26% in relation to legal advice around intellectual property rights.

Commitment:

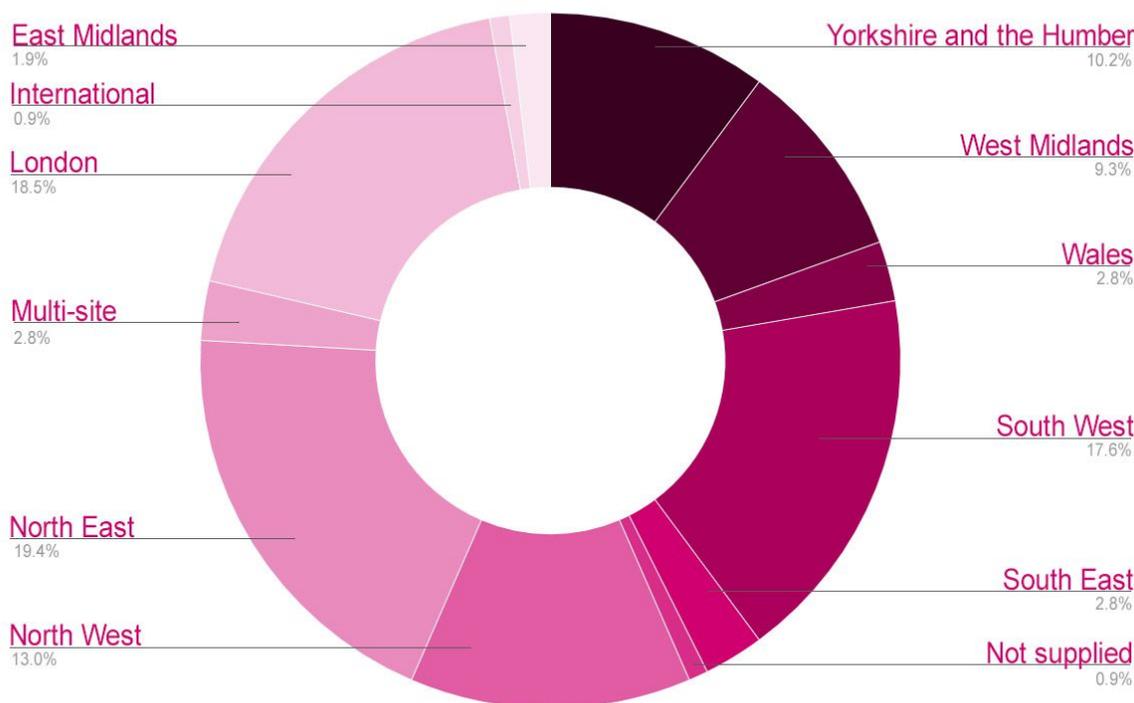
- In order to support the cultural sector in its understanding of Intellectual Property:
 - The Intellectual Property Office will work with the British Library's Business & Intellectual Property Centres and representatives from the cultural sector to develop guidance and training so that cultural organisations can better understand the Intellectual Property framework and its relevance to them.
 - The Space will lead work with cultural organisations, cultural rights holders and seek guidance from the Intellectual Property Office to develop a Cultural Digital Rights Code of Practice.

Intellectual Property training for the culture sector

Over the last year the Intellectual Property Office (IPO), in collaboration with the British Library's Business and IP Centre Network, successfully delivered six free IP training seminars around the country tailored to representatives from across the culture sector. The sessions provided training on the IP framework including creating and managing IP assets and the rules around copyright such as exceptions and obtaining permissions for use. The seminars also gave attendees opportunities to ask organisation-specific questions about IP rights.

Over 100 cultural organisations attended the seminars which were held in the central libraries of Manchester, Newcastle, Hull and Birmingham, Junction 3 Library Bristol, and the British Library, London. **98% of attendees said that from the seminars they had a better understanding of IP** and found it easier to understand when to get permission to use somebody else's IP. Attendees found information around copyright exceptions and the Orphan Works Licensing Scheme most useful, along with practical discussions which helped them put theory into practice. The overall impression was that the seminars were useful, informative and clearly expressed.

Regional percentage breakdown of attendees



The IPO will ensure that resources and opportunities for further training such as their [IP master class](#) will be promoted to the culture sector, including through the Digital Culture network. The materials used to deliver these seminars has also been published on the [online hub](#) commissioned by the digitisation Taskforce and can be freely accessed online. Further resources can be found on the [IPO's GOV.UK](#) webpage. Of particular relevance to the cultural sector; the [IP Equip](#) e-learning tool that covers all the main IP rights, the [Exceptions to copyright: Libraries, Archives and Museums](#) publication, and the [IPO's events calendar](#) that lists upcoming IP training and awareness events. These will likewise be signposted through the Digital Culture network.

Intellectual Property terminology and online toolkit

The Space has consulted widely with arts organisations and practitioners across the arts and cultural sector, to address and support the sector's needs outlined in the CiD report. As a result of these discussions, it has focussed on simplification and clarity around IP terminology commonly used by the sector as well as the ways that content is used on digital platforms, to make the contracting of contributors, creators and existing copyright holders easier.

Some short [guidance](#) was published by The Space in Summer 2018, but the main focus of its work in this area has been around ongoing discussions and correspondence with the major rights representatives and talent unions, to explore how their existing framework terms can address these needs through further modernisation. Over the past year, The Space started with the performing arts sector and has held positive meetings with Equity, The Musicians' Union, PRS for Music, and The Writers' Guild, where it has sought a consensus (in the first instance) on some common terminology or a 'lexicon' of different digital uses and

rights. These discussions have been predicated on the shared agreement that this terminology does not undermine any current rights framework or Union agreement(s) where digital use rights were already in place - rather, it aimed to complement them, by identifying the primary online uses and rights increasingly required by cultural organisations and developing some common language around them. This language may then be referred to and/or negotiated (for example, by UK Theatre) where not already covered under existing agreements.

The majority of the rights representatives and Talent Unions have now endorsed the [draft terminology](#), covering digital uses such as “Live Streaming”, “On Demand Access”, “Distribution / Delivery”, “Interactive”, “Territory” and “Promotional Extracts”. Having achieved this The Space plans to work with the rights organisations to promote this terminology and guidance more widely. For example, UK Theatre are planning to adopt the agreed terminology in their next round of framework negotiations with the theatre Talent Unions.

As part of this work The Space will be creating an online toolkit for arts and cultural organisations. This will contain the guidance and lexicon cited above, as well as questions to ask yourself when embarking on digital distribution and self-publishing, tips for creating a contract, and templates for use. This will be available in September and will be published on The Space website in the [resources](#) section.

Innovation

Research and Development

The UK is a global leader in research and innovation. It is home to four of the top 10 universities in the world, and rated a strong innovator in the [2019 European Innovation Scoreboard](#). The cultural and creative sectors greatly contribute to the UK's excellence in innovation and the fast rate of their growth is largely driven by a combination of creative risk taking and emphasis on Research and Development (R&D). This is increasingly being recognised by both the private and public sector, for example [UK Research and Innovation's \(UKRI\) 2019 innovation Roadmap programme](#), which aims to increase understanding of the UK's current research capability and guide future planning, states that "the arts and humanities are instrumental in helping to shape skills, ideas and products at the interface between creativity and technology upon which that future turns."

The last year saw the launch of the [Audience of the Future programme](#), a £33 million investment, in innovative new practises and content in the field of immersive reality. The winners of the demonstrator programme were announced in February 2019 and we were delighted to see that two awards were made to collaborative efforts led by or heavily featuring cultural practitioners, a testament to the sector's ability to push the boundaries and provoke new ways of thinking about and experiencing technology:

- **Dinosaurs and Robots:** A consortium led by creative content studio Factory 42 including the Almeida Theatre, Natural History Museum, Science Museum Group and the University of Exeter. Set to launch in 2020 across both the Science Museum and the Natural History Museum, visitors will encounter a mixed-reality experience featuring iconic objects from the museums' collections, bringing robotics, artificial intelligence and dinosaurs to life.
- **Immersive Performance Experiences:** Led by the Royal Shakespeare company, fifteen specialist organisations and pioneers in immersive technology including leading British arts companies, global technology giant Magic Leap and top British universities will use their expertise to shape how audiences will experience live performance in the future. For two years the group will work together to explore what it means to perform live using emerging technologies with the intention of delivering an immersive live performance on multiple platforms in 2020.

Commitments:

- The National Gallery and the Royal Opera House will open up new opportunities for the culture sector to experiment with new technology and cultural content:
 - The National Gallery, working with data partners like Nesta, will create an Innovation Lab so that cultural organisations, and in particular museums, are able to make best use of advanced digital technologies in enhancing visitor experience and creating content, and can develop best practice in collaborating with the technology and academic sectors.
 - The Royal Opera House will create an Audience Lab to work with diverse talent, developing new skill sets to create innovative content using

emerging technologies. The Audience Lab will strive to develop cross-sector collaborations to open up new experiences for audiences.

- The Royal Shakespeare Company, the BBC and the Arts and Humanities Research Council will share selected Research & Development prototypes and technical assets and will offer related capacity building and innovation support to cultural partners of all sizes across the UK.

Innovation Lab

Over the past year both the National Gallery and the Royal Opera House have been working with partners to develop innovative new lab programmes in line with their commitments under the Culture is Digital (CiD) report. In creating their labs, both the Royal Opera House and National Gallery have sought diverging approaches - both a physical location and a distributed programme of activities - but both have sought to create opportunities for cultural organisations to experience the latest in digital technologies and techniques and learn from leaders in this space.

In the last year the Gallery has undertaken its first innovation projects and is preparing for the launch of its Innovation space, National Gallery X, in summer 2019. To begin building their Innovation capability, the Gallery partnered with StoryFutures, a Creative Clusters funded project led by Royal Holloway University and The National Film and Television School. As the first demonstrator in their new programme they ran an open innovation workshop with a variety of immersive media companies looking at how they could create an audience experience that puts one of our great masterpieces by Veronese back in its historical context. The results of this work will be tested at the Gallery in the coming months.

This collaborative activity has laid the groundwork for the opening of the Gallery's innovation space, National Gallery X. This space, opening within the National Gallery's London Piccadilly estate, will house a range of activity, leading with a collaborative R&D project with King's College London. Their connected studio will take technologies in development in King's Labs, from robotics to informatics to neurobiology, and ask what they might mean for art in 10 years time.

Working with artists, scientists, curators and community audiences, the National Gallery will create prototypes that both demonstrate the capacity of new technology and question its potential. This will feed back into live research at King's and create a range of new experiences for Gallery audiences. Crucially, the Gallery will bring other cultural institutions into the creative process to make it a genuine national scale initiative. They will also focus on building the technical, strategic and procurement frameworks that can help them and other organisations to build immersive studios across the country.

Audience Labs

'The Audience Labs' was founded at the Royal Opera House in 2018. Its aim is to answer questions about the future of the performing arts and to make innovative experiences on new stages everywhere, including digital, physical and the emerging world in-between. The Audience Labs has been working with partners from across the creative and tech industries -

both new partners from the technology industry and long-standing collaborators such as [Arup](#) - to uncover innovative ways to reach audiences beyond the Covent Garden theatres. In its initial stages, it has run several Creative Labs for artists and a series of round tables around the future of art and technology.

Over the next year the Royal Opera House will launch a series of exciting new programmes as part of the Audience Labs, including:

- An Augmented Reality ballet project exploring ballet and choreography away from the stage as well as a Mixed Reality project looking at choreography, the body and identity in digital spaces. Both projects will bring together leading choreographers with global technology companies.
- A project aiming to create the first original opera in HyperReality - an advanced, wireless form of VR popularised by experiences like [The Void's Star Wars experience](#). This opera will be created by an all-female creative team as part of an award under the Audience of the Future programme.
- The introduction of the first Immersive Opera Development Award in collaboration with [GUAP magazine](#) aimed at highlighting and encouraging the use of technology in the sector as well as celebrating diverse talent.



Royal Opera House/GUAP Immersive Opera Development Lab, May 2019. Photo by Sampson Collins.

The Royal Opera House are making diverse talent development a central part of the Audience Labs. They will give a platform to a wide array of voices from inside and outside the cultural and creative industries. As the programme develops, they have committed to transparency and to share lessons learnt and knowledge developed with the wider sector.

Immersive Fellowships

Working with technology innovator, Magic Leap, the Royal Shakespeare Company have launched a Fellowships programme to explore the future of theatre innovation. Six students will discover the future of theatre using spatial computing technology. The Fellowships will give the candidates access to Magic Leap's technology, skills and expertise, as well as the depth and breadth of the Royal Shakespeare Company's theatrical knowledge and experience. Each Fellow will benefit from a year's long programme, including a week residency at Magic Leap exploring their technology, skills and expertise, and with the Royal Shakespeare Company working alongside their creative teams. The Fellowships will focus on three key areas of skill and expertise:

- Creative (actor, performer, designer, producer)
- Narrator (writer, dramaturg)
- Technical producer (photogrammetry, motion-capture and volumetric-capture), spatial computing programmer or coder



The six digital Theatre Fellows - from left to right are Zoë O'Shea, Thomas Buckley, James Horn, Sharon Clark, James Simpson and Lou Doye

The results of this R&D exercise will shape the next stage of the Royal Shakespeare Company and Magic Leap partnership, including the development of major projects such as creating large-scale theatre performances using spatial computing. The journey [will be followed through a series of blogs led by innovation foundation, Nesta](#), allowing the knowledge gained to be shared throughout the cultural and creative industries.

Next steps

As highlighted in the CiD report, smaller creative organisations often lack the capacity for strategic, cross-sectoral R&D which, if properly recognised and supported, could propel growth within the sector. As evidenced by resources like the [Creative Industries Sector Deal](#) this is a barrier to sectors like the wider creative industries and digital as well.

Central to the R&D programmes featured above has been to build in collaborative programmes that enable creative organisations to absorb the outputs and lessons from cultural R&D programmes conducted at scale. However there remains a residual question about how best to distribute learnings from such programmes beyond the organisations that directly participate and ensure greater knowledge distribution into the wider sector? As demonstrated above, cultural organisations like the Royal Shakespeare Company are working with experts such as NESTA to build knowledge sharing into their R&D programmes, but more can be done to coordinate such efforts and ensure this information is findable by smaller organisations. To support this, DCMS will convene leaders from across the cultural, creative industries and digital sectors to discuss a common approach to sharing R&D outputs and knowledge.

CASE STUDY: SHARING R&D

The goal is as simple as it is ambitious: the BBC is committed to being more open than ever before, acting as a key partner to the UK's creative industries. In the past twelve months BBC Arts in particular has used its reach and platforms to showcase the UK's incredible talent and helped open up cultural institutions and organisations to audiences in new ways. It has trialled innovative partnerships with both the museum and dance sectors, firstly with Civilisations then with #DancePassion, to explore how collaborative working can find new ways of storytelling.

Civilisations was a landmark programme on BBC Two described by the FT as 'an educative extravaganza of Reithian scope and aspiration'. The nine-part series was accompanied by a sector-wide festival in partnership with hundreds of UK museums, libraries, galleries and archives to shine a light on their collections and inspire debate around them. There were more than 260 public events at partner venues, featured on Culture 24's Museum Crush listings site, and each inspired by the themes of Civilisations.

Using technology to broaden the appeal of content, BBC Arts in partnership with BBC R&D opened a treasure chest of digital storytelling tools to be used and explored by the sector to help bring new audiences to their collections. Civilisations Festival Partners were offered access to digital technology with 95 organisations attending workshops to learn more about what was on offer, practical training in how to use them and crucially make the final results available not just on BBC platforms but also hosting them on their own sites and social channels.



The BBC launched its first augmented reality app for the festival, Civilisations AR. Developed by BBC Research & Development, BBC Arts and Nexus Studios, the app features more than 30 fascinating artefacts from museums across the UK that have been digitally scanned and made available to view in 3D as part of a new virtual exhibition. For the majority of institutions it was also a steep learning curve, supported by the BBC, to discover how to digitally capture items for augmented reality. At the heart of the Civilisations AR experience is a core 'magic spotlight' feature, which allows users to uncover annotations, audio and imagery that enrich the story of each exhibit. An X-ray function lets users see through or inside an object, while a restoration feature can be used to rub through the layers of history. Users can browse the exhibition geographically, using an AR globe, or via the themes of the series. The AR App, released on both iOS and Android, has had more than 725,000 downloads to date, with high appreciation scores from audiences.

The learnings from the Civilisations Festival in March 2018 were applied to the dance sector for #DancePassion, an on air and online celebration of the UK's flourishing dance scene in partnership with One Dance UK and almost 50 dance companies and independent artists. Audiences were able to watch 11 hours of continuous live streaming, from hip hop to ballet, from six cities in each of the four nations. Trialling new software which by-passes the need for expensive outside broadcast equipment it significantly reduced the cost of bringing performances from companies big and small to a wider audience.

Collections

The UK's world-renowned museums, libraries, archives, galleries and heritage organisations are a major asset for the UK, playing a central role in the country's multi-billion heritage

tourist economy, and contributing significantly to our global influence and reputation. About half of all visitors to the UK cite culture as their reason for visiting. There are over 236 million heritage related visits annually, bringing over £16.9 billion to the economy.

Digitisation offers the cultural sector the opportunity to dramatically increase access to their collections. As well as ensuring widest possible engagement with cultural objects, this enhanced access can lead to the discovery of otherwise hidden or inaccessible materials, new research and insights, and also to the reshaping of 'thematic collections'. It can also lead to greater audience participation in culture, such as the creation of new content, as in the Yorkshire Sculpture Park '[Sculpture Cam](#)' project.

CASE STUDY: CROWDSOURCING

When BFI's [Britain on Film](#) presented the UK with online access to an astonishing 10,000 heritage films, - geo-tagged to let the public find films local to them from 1895 to the 21st century - it became a hit. This large, but curated, selection of films, mostly unknown to audiences, represents all corners of the nation. Since its launch in 2015, Britain on Film has amassed 66 million video views with 78% reach outside London/South East England, making it a truly national audience.

As the views of Britain on Film racked up into the millions, feedback from our audience showed that they had found something directly meaningful and inherently rewarding to them in our online films – nostalgia for place and purpose. Increasingly we found an altruistic public appetite to share.

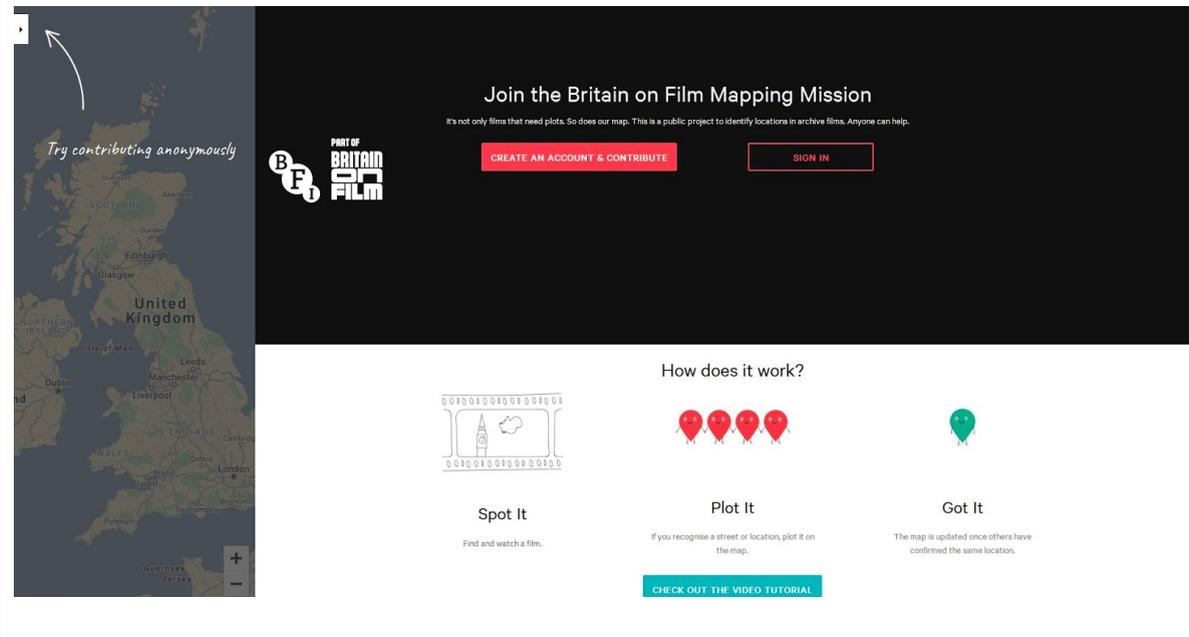
The difficulty was that the public quickly converted from 'viewers' into 'local experts' who wanted to correct, amplify and react to their local films. The immediacy of their response meant that conventional communication channels would not be sufficient to constructively collate their input. It became clear that direct contribution by the public themselves would be the most efficient and most engaging way for this 'local expertise' to find its way onto the Britain in Film collection. We needed to give audiences the freedom to be interactive citizens or 'location experts' while ensuring their new input was stored within the BFI's Collection Information Database.

[Britain on Film](#) presents the public with an online interactive map of the UK in which each film is geo-tagged to let visitors navigate and search by geo-location. The viewer searches a location on the map which brings up any of the BFI's collection of 10,000 digitised films, relating to that location. Britain on Film was built on the premise that any person looking at film is going to be curious about what films exist for their special places. This premise turned out to be good foresight about the public's interests.

With the response from the public so strong, and so delightful, helpful and enlightening, we had to launch an evaluation scheme, to define how best to respond to the public's urge to tell us more. We created a research pilot and with our Regional and National Film Archive partners evaluated audience engagement for such a new data-gathering initiative. The result was [BFI Contribute](#). A new BFI crowdsourcing platform, associated with Britain on Film, launched in December 2018.

The BFI Contribute platform invites everyone to come and watch, pause and put their own location pins at scene level within a film's timeline, be it to note their local high street, their great, great relative or favourite places. They can see their pinned location as it is today via Google Street View and leave their comments and stories. It is exactly the type of engagement that the original project hoped for, but on a greater scale than expected.

Interest in our mapping mission has been steady and growing. BFI is using digital technology to attract a diverse audience, and digital technology to enable its audience to function as expert witnesses to their own heritage and share it with the rest of their nation.



The screenshot displays the BFI Contribute website interface. On the left, a map of the United Kingdom is shown with a white arrow pointing to a location pin and the text "Try contributing anonymously". The main content area features a dark background with the heading "Join the Britain on Film Mapping Mission" and a sub-heading "It's not only films that need plots. So does our map. This is a public project to identify locations in archive films. Anyone can help." Below this are two buttons: "CREATE AN ACCOUNT & CONTRIBUTE" and "SIGN IN". The BFI logo is also visible. At the bottom, a section titled "How does it work?" is divided into three steps: "Spot It" (Find and watch a film.), "Plot It" (If you recognise a street or location, plot it on the map.), and "Got It" (The map is updated once others have confirmed the same location.). A "CHECK OUT THE VIDEO TUTORIAL" button is located at the bottom of this section.

Commitment:

- The National Archives will work with culture sector representatives to develop a new strategic approach to the digitisation and presentation of cultural objects, for example, looking at the common standards needed to make our nation's great cultural assets more interoperable, discoverable and sustainable.

The CiD report brought together policy recommendations from the [Culture White Paper](#), the [Strategic review of DCMS-sponsored museums](#) and [The Mendoza Review](#). It called on the sector to create a taskforce to tackle questions around digitisation.

Led by the National Archives, The Digitisation Taskforce was formed with representation from the Arts and Humanities Research Council, BFI, BBC, British Library, Collections Trust, Corsham Institute, Culture24, National Lottery Heritage Fund, Jisc, Natural History Museum, Oxford University, Tate, Wellcome. The objective of the group was to take a strategic view of digitisation: to identify challenges and opportunities, and to suggest ways to address both. Using facilitated discussion, presentations and workshops, the group surfaced and explored the main issues, as well as undertaking a national survey of cultural heritage institutions.

Collections Digitisation Survey

Methodology

In October 2018, a qualitative questionnaire was issued to the members of the Taskforce, receiving [7] detailed responses. This was used as the basis for a wider survey in January 2019, which received 86 responses from at least 66 institutions around the UK, including museums, archives and libraries.

Key findings

What is cultural heritage digitisation?

Almost all survey respondents saw digitisation in terms of digitised representations of collection items (such as 2D or 3D images); around half also included catalogue data and metadata about digital assets; and around 20% also included categories such as ‘born digital’ assets or wider workflows including conservation, preparation and digital preservation.

Why digitise?

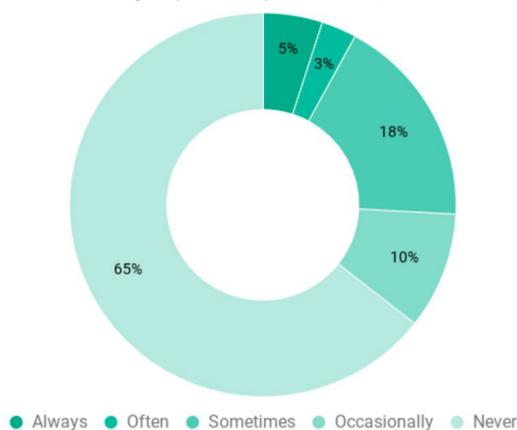
All institution types prioritised access as a key reason for digitising collections, followed by preservation. Reducing the use of originals was important to archives and libraries, though in Museums digitisation was recognised as sometimes increasing demand for objects. Interpretation, academic research and education were also key, with user request and commercial opportunities or partnerships as lower-scored reasons.

How could digitisation get faster and better?

Respondents would most value support with funding and costings, and with best practice standards. Funding and guidance, as well as development of technical skills and digital storage, also topped the factors that would enable organisations to digitise more.

The survey also covered more technical areas around preferred formats for digitised material; means of digital publishing (with institutions in most or somewhat deprived areas less likely to publish digitised material); and current digitisation progress and plans. 65% of respondents do not publish open linked data, owing to resource and knowledge constraints – this limits the potential for digitised collections to be ‘more than the sum of their parts’.

Do you publish open linked data?



Museums were slightly more likely to publish open linked data than archives and libraries

Larger institutions were more likely to publish open link data

Resource (Staff/Time)	13
Knowledge/Expertise	10
Not ready for this yet	8
Systems	7
Internal policies/process	6
Copyright issues	5
No barriers	4
Money	3

Survey respondents felt that they would most value support with making funding applications, and the implementation of best practice. To address this the Taskforce, supported by funding from The National Archives, commissioned Culture24 and Collections Trust to create a series of [ten new online resources](#) that together provide a central online hub with an overview of the issues you need to consider before you begin digitising your collection. The hub is part of Culture24's Digital Pathways site, a new online resource bank funded by Arts Council England. It is freely available to all organisations including museums, libraries and archives and provides people with the tools and knowledge they need to build their digital skills and reach audiences.

Due to the benefits and value the taskforce found in collaboration, it has decided to continue as a network for issues around digitisation. They can be contacted through the [online hub](#). As a network it will continue to share information on initiatives and best practice as well as to take forward work on other key themes identified through its questionnaire and survey, such as:

- **Content:** to explore approaches to a strategic approach to content, which could acknowledge and address gaps in digitised content and collections.
- **Funding and economic models:** to look into partnerships and to create further tools and advice around funding models and applications.
- **Skills and knowledge:** to look into different models and disseminate resources for skills and knowledge sharing.
- **Sustainability and preservation:** to discuss ways to future-proof content and access to it.

CASE STUDY: DIGITAL TRANSFORMATION FOR PUBLIC LIBRARIES

The British Library, commissioned by the Carnegie UK Trust and Arts Council England have been exploring what a new online platform (or 'single digital presence') for public libraries in the UK could look like, what it could be used for and how such an offer might fit in with existing digital library systems.

To do this the British Library looked at comparable models and best practice internationally, consulted with public library service providers, public library staff and carried out top level engagement with users to understand how their views on current services.

The [report](#), published in June 2019 identifies and assesses five options for a new digital platform for libraries. These options are based on a number of considerations including: desirability, complexity and the ease of implementation. The scope of the research included functional systems and transactional services as well as current and future ways in which new and existing users can be engaged at local and national level.

The project will continue with a deeper look into user need and value with a team from the Home Office Digital Intern team, further research into best case models and examples of comparable digital innovation in other sectors as well as continuing meaningful engagement with major stakeholders to start discussions regarding the project's future governance, design and delivery.



Collections and new technology

Increased use of Artificial Intelligence (AI) can bring major social and economic benefits to the UK. It has been [estimated](#) that AI could add an additional USD \$814 billion (£630 billion) to the UK economy by 2035, increasing the annual growth rate of GVA from 2.5 to 3.9%. AI can offer massive gains in efficiency and performance to most or all industry sectors, including the cultural and creative industries.

The Industrial Strategy placed AI and Data as one of four [Grand Challenges](#) with the ambition to “*put the UK at the forefront of the AI and data revolution*”. As part of this ambition, the Autumn Budget has announced that “*the Office for AI and Government Digital Service (GDS) will review how government can use AI, automation and data in new ways to drive public sector productivity and wider economic benefits*”. The Office for Artificial Intelligence and GDS have worked closely with Faculty and the Alan Turing Institute to publish a practical guide to understand, develop, and implement AI solutions in a safe and ethical way. The newly created “[Guide to Using Artificial Intelligence in the UK Government](#)” aims to help leaders across the public sector to better understand what AI is and how it can be used to solve problems within their departments. Using this tool, we will work closely with ALBs in the cultural space to explore what AI means for them and the sectors they work with.

The cultural sector has clearly started to look at implications and applications of AI and Machine Learning to extrapolate and enhance cultural data. This year we have seen the

Natural History Museum exploring the uses of AI, including trials of Optical Character Recognition (OCR) and image analysis on collections and content. The Alan Turing Institute and the British Library, together with researchers from a range of universities, have been awarded £9.2 million from the UKRI's Strategic Priorities Fund (SPF) for the 'Living with Machines' project. Led by the Arts and Humanities Research Council (AHRC), this will see data scientists working with curators, historians, geographers and computational linguists with the goal to devise new methods in data science and AI that can be applied to historical resources.



AI: More than Human, Barbican Centre – 16 May-26 August 2019. 2065, © Lawrence Lek Credit Tristan Fewings/Getty Images

Alongside their role in engaging the public in the UK's culture and heritage, the collections held by our museums, libraries and archives are a vital research infrastructure. The [UKRI Roadmap Progress Report](#) notes the importance of collections to the HEI and research community, as well as the public, and states that the "increasingly multimodal collections held in these institutions present a priceless and irreplaceable asset for future research." However the siloed nature of cultural and heritage collections online means opportunities are lost for cross-disciplinary lines of research, and, as referenced in the CiD report, for curated content to be made available across institutions.

To better understand the applications and limitations of emerging technologies and complement the work of the National Archives taskforce, DCMS commissioned a feasibility study into a recommended "framework" for mapping and connecting digitised cultural collections within England, looking in particular at emerging technologies like AI, with the view of making them searchable across organisations and disciplines. Collections Trust, a member of the digitisation taskforce, was awarded this commission and took forward the

research. The conclusions drawn were that a framework for linking collections is possible in the form of an aggregator, which could facilitate better data access and support the development of machine learning applications. This research will be published and made available on GOV.UK.

Better coordination and investment in new technologies like machine learning to bridge the gap between collections could create new opportunities for research across – not just within – collections as well as improving discoverability for audiences. The AHRC are planning to press ahead with plans for a major new research programme that uses the catalytic potential of new technology to dissolve barriers between different collections. In the future we will consider how to increase our collaboration with UKRI on initiatives such as this to support enhanced inter-disciplinary work across collections, both as a research infrastructure, and as an important resource for public engagement with the UK's rich culture and heritage.