BRISTOL CULTURE DIGITAL PLAN 2018-2022

Bristol Culture has identified the following key areas of digital activity required to support the overall business plan until 2022.

Digital Objectives

The digital objectives for Bristol Culture fall into the following main areas and run horizontally across the organisation, developed and pioneered by the digital team but supported and carried out by staff in all areas.

Digital is not just what we do, it is how we do it - we are still realising the transformative effect of online collaboration, sharing documents and repurposing data for new uses. Whilst often difficult to implement, and fraught with technical issues, we have seen the benefits in through an overall reduction in the work required to order stock in our shops, analyse information and provide digital services (ref 2). In order to effectively use our spaces and reach wider audiences, digital activity needs to continue to be at the very core to the work of the Bristol Culture team.

 Having continued to roll out new technology in 2016-17 we now need to deliver on some of the momentum we have put in place whilst supporting staff in adopting - moving proof of concepts into production, linking up data across teams and realising the benefits of a digital-by-default way of working. With all digitised activity being measurable, ultimately we are looking to use the data we generate operationally to make improvements to process and deliver better value for money. It all comes back to making effective use of data. We are investing energy in visualising cross disciplinary data sources over time to spot patterns and find out how to harness our organisational rhythm. This comes at a challenging time for maintaining and migrating the legacy of past digital projects - we need to keep up with our audiences' use of and expectations for cultural technology, or risk becoming obsolete in an ever more digital-competent age.

LEADERSHIP

We will continue our role as a national lead in the use of digital and emerging technology for heritage & cultural organisations.

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Demonstrate digital leadership	Actively communicating our successes and failures. Present at user group meetings and at industry conferences.	Present at museum technology conferences conferences at least 1 / year	£1000 Budget for travel /year	2019,2020: Axiell European user group meeting 2018,2021: Museum Computer Group Meeting	All digital team
Demonstrate open practice	Regular blogging about new projects on our labs blog (www.labs.bristolmuseums.org.uk)	2 blog posts published on experimentation and new developments		Quarterly	Digital team and technical partners and students
Research and Development	Build and prototype new digital resources using open source	Implement solutions in		2 Exhibitions / year	AV content designer

	technology	gallery			

AUDIENCE INSIGHT

We shall develop methodologies to research key audience insights about visitors across the south west and disseminate nationally. This will inform our approaches for targeted marketing online & offline for events and exhibitions, building on our Audience Development strategy which focuses on key audience profiles and use the latest methodologies for analysing online and onsite audience engagement.

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Performance monitoring for the Culture Service	Updating of baseline visitor data for all sites	Data to be inputted each month		Monthly data input, quarterly review of progress	Cross-service staff input data directly into the system
Visitor feedback	Maintain visitor Survey technology	2700 surveys per 1 million visitors across all our sites in order to achieve 99% confidence	£300/year license for survey monkey	Quarterly review	User researcher for audience development

		self-complete visitor surveys			
User Research	Carrying out analysis of digital and visitor engagement to feed into next iteration of development cycles of web, gallery interactive and physical technology	Implement 1 improvement based on user feedback / observations	£3000	6 week project cycles	User research team
Experimentation	Contribution to the annual "Let's get Real" project framework	Attend 3 workshops, and publish findings	£3000	Yearly	User research team
Targeted marketing for exhibitions	Contribute user research to exhibition planning , marketing and evaluation	Apply 1 targeting method for priority audience (as per audience development plan)		For each major exhibition	User research team & exhibitions project team
Redevelopment planning	Develop roadmap for upgrading & replacing gallery technology based on future growth / changes in visitors	Plan developed		2019	Digital team

	use of technology				
Redevelopment planning	Begin to implement prototyes to test assumptions for how visitors will use new technology on site e.g. digital signage improvements, mobile guides, location based information. Identify technical partners who can collaborate.	Prototypes implemeted	Budget form other projects.	2020-2021	Digital team

DIGITAL SKILLS

Developing staff skills in digital is key to working effectively - saving time in doing tasks quickly and empowering staff to develop their own techniques in data analysis, reducing the overhead in supporting them to adopt new technology. Across the service there is a need for basic, Intermediate or advanced training on using our core digital tools - shopify, trello, outlook and google spreadsheets. Following the Mozilla 'open badges' initiative - we'll continue to run a digital skills programme for staff, volunteers and partners.+

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Improve staff and volunteer digital skills	Run digital skills sessions throughout the year	All new staff to attend at least 1 session		yearly	Digital team
Improve training facilities	Improve access to training facilities through investigating conference software and purchase of laptops.	Aim to provide facilities for 10 people to be trained at a time	well need £1000 for new laptops	Yearly improvements in equipment	Digital team
Recognition for skills	Follow open badges approach to publish staff achievements online	All recent course attendees awarded a digital badge	£10/month hosting costs (shared over other projects)	Quarterly	Digital manager
Improve course satisfaction	Use continual feedback to improve the contents of the courses	Each course to be reviewed		Annually	Digital manager
Train the trainer	Empower other staff members to develop and deliver courses	Train 1 new "trainer" each year		annually	Digital team

DIGITAL MARKETING STRATEGY

We need to harness the tools and techniques available to promote our activities and services online. Through cost per click advertising, 3rd party platforms, social media and our own channels integrated with analytics we can reach new audiences, find our influencers and optimise our content to increase traffic and conversion in our online shop and ticketing facilities.

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Benchmarking with other cultural organisations in the region	Undertake research into partnership marketing with Bath & Bristol Cultural Destinations Project.	Attend benchmarking meetings	£200 / year travel to attend meetings	Quarterly	User researcher for digital engagement
Improve reach and take up of digital services	Analysis and coordination of marketing campaigns – e.g. Flash Sale. Continuation of Google AdWords Campaigns, continually experimenting and refining keyword use.	Increase conversion for web pages offering ticketing and payments.	Costs of paid advertising. Also Google Ad grant budget of £10,000/year equivalent	Quarterly review of conversion kpis per campaign	User researcher for digital engagement
Improve	Deliver a programme of	Improve	£4,000 retainer	yearly	Head of digital / external

conversion rate (sales and ticketing)	digital optimisation based on advice from external consultants e.g. Creative Tourist.	conversion rates by 1%	with developers		developers & User research team
Improve social media reach	Publish social media content (including in foreign languages)	Year on year growth in number of social media followers 10 tweets		10 tweet per main exhibition & retail activity per week	Digital apprentice

DIGITAL COLLECTIONS [CONTENT]

The ever growing digital footprint of our collections is a resource that requires careful management. In order to develop and exploit this resource we need to maintain access both to staff and the public, attract and build audiences, and to preserve its digital assets and to understand how new technology can be used to promote and publish it. Through a new approach to online collections and exhibitions based on user feedback and current digital trends we aim to improve accessibility to our digital collections.

ACCESSIBILITY

We have reached a bottleneck with our current technology (software & hardware) which is limiting accessibility to our digital collections. We'll need to address this in 2018-2022 in order to deliver on our ambitions to inspire and amaze people with our collections.

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Improve online collections	Develop the project plan for creating a new online collections resources.			End of 2019	Digital manager , collections and archives team
Improve online collections	Begin implementation of the project plan to improve collections online, starting with a low cost alpha for user testing. BECM collection to be made available via new platform initially	100,000 records available with multiemdia	£5,000 This will require a web development agency including hosting costs and	2020	Digital manager in liaison with external consultant to develop the project plan and specification
Improve online collections	Begin to decommission the old collections online, move more collections to new format.	Achieve 2,000 unique page views / month with >2mins per user and reduced bounce rate compared to current collections		End of 2020	Digital manager in liaison with external consultant to develop the project plan and specification

		online			
Improve online collections	Incrementally refine the landing pages based on digital engargement metrics. Using google analytics we can analyse how content performs. We will use feedback forms to gather visitor satisfaction	80% satisfaction		End of 2021	Digital manager in liaison with external consultant to develop the project plan and specification
Decommission non-performing websites	Develop the plan for migrating content from discovering.bristol.org.uk	Specifically we'll report on where global traffic comes from and which collections areas are most popular globally			Digital manager & User researchers
Experimentation	Undertake research into landing pages for online collections to understand which content is popular and how users navigate the platform	Review kpis for each platform. Run A/B testing in 6 week cycles		Quarterly	User research team
Exhibitions Online	Develop and improve the exhibitions online platform	2 online exhibitions uploaded	£600 / year hosting + £1000 new developments	Yearly	Digital manager & User researchers

DIGITAL PRESERVATION AND DIGITAL ASSET MANAGEMENT

Bristol Culture's approach to digital preservation will be informed by guidance from national organisations and professional bodies including The National Archives, the Archives and Records Association, the Museums Association, the Collections Trust, the Digital Preservation Coalition and the British Library. This means that we will Bristol Culture will aim to conform to the Open Archival Information System (OAIS) reference model (ISO 14721:2012).

Bristol Culture recognises that the field of digital preservation is progressing rapidly. Digital preservation policy, together with digital preservation strategies and procedures will be reviewed annually.

[1] See Bristol Archives Acquisition Policy
[2] http://www.digitalpreservation.gov/documents/NDSA_Levels_Archiving_2013.pdf

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Achieve national standards for digital archives	Meet the National Digital Stewardship Alliance (NSDA) Levels of Digital Preservation.[2]	NSDA Level 1		2019	All staff responsible for digitization to follow set procedures
Achieve national standards in digitisation	Achieve NDSA standards in digital preservation	NSDA Levels 2, 3 and 4		by 2020.	All staff responsible for digitization to follow set

					procedures
Improve digitisation processes	Strategies and procedures to be developed in order to incorporate new tasks outlined by the standards, and to improve discoverability of digital assets	As above		By end of 2019 and reviewed annually	Digital Manger in collaboration with archives and collections

CAPTURED CONTENT (INCLUDING DIGITISATION OF COLLECTIONS)

Photography, scanning, 3D scanning, filming and audio recording are the mechanisms by which we digitise collections in order to publish content to inspire and engage audiences. The end result could be digital however we also print facsimilies for exhibition and reproduce 3D models for scientific study or for sale in our shop. Digitisation activities are carried our by a range of staff depending on the required output. We will continue to provide high quality digitisation services to researchers, industry and the public and increase the uptake through refinements to the business model, improved process monitoring and reporting and a better web presence advertising the digitisation bureau. This will involve the training of digitisation staff and apprentices.

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Photography of collections	Ongoing photography of objects to support exhibitions and documentation activities	1000new images uploaded to Emu DAMS.	Digitisation equipment such as flash bulbs, lenses and associated maintenance requires budget of approximately £2000 / year	monthly	Digitisation officer
Digitisation services for commercial use	Provide digitisation on demand services to researchers and public	£2000	Income generating activity	yearly	Digitisation officer
Staff training	train staff basics of object photography, use of equipment and digital media skills	1 workshop on photography and 1:1 sessions for new staff		Yearly	Digitisation officer

EXHIBITIONS AUDIO-VISUAL RnD

In order to continue to create award winning exhibitions we need a robust approach to developing and maintaining audio-visual elements for exhibitions, permanent and temporary. With limited resources we need to make the most of open source technology and invest in re-usable systems. We'll also need to continue to replace and decomission legacy systems to engage a new generation of digital consumers.

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Excellent galleries	implement improvements to gallery technology based on user feedback and		£10,000 budget for carrying our repairs and replacements to permanent gallery technology		AV content designer and apprentice
Excellent exhibitions	Provide AV expertise for exhibitions programme	Av content designer to attend all exhibition development meetings	£2000 / year for new / replacement gallery technology		Content Designer / AV technical officer oversees hardware sourcing and installation
Improved visitor experience	Resolve issues logged on the digital support Trello board and count the backlog	Maximum of 20 issues in backlog at any one time		Digital support trello cards to be resolves or actioned daily	AV content designer and apprentice

	of outstanding tickets, which form a running kpi for downtime				

COLLABORATE WITH UNIVERSITY AND TECHNICAL PARTNERS

We will need to foster relationships with regional groups, business and researchers to leverage budgets and take opportunities to trial new technology. We will continue our "student as producer" programme in order to build low cost prototypes as novel solutions to business problems and Seek partnership with professional bodies, cultural institutions and digital specialist groups, sharing skills and collaborating on joint research- host one seminar / forum on digital innovation

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
"Student as Producer"	Coordinate student projects	host 2 student project teams each year	£1000 / year	Q2 each year (to coincide with the academic year)	Head of digital & course leader from University
Industry collaboration	Work on digital solutions with a technical partner to leverage new technology at reduced cost	1 solution prototyped by third party		2020	Head of digital
Gallery technology experimentation	Use extra capacity from student development teams to trial new technology in galleries	1 new system trialed	As above	yearly	Head of digital, Bristol University Computer Sciences department

OPERATIONAL / INFRASTRUCTURE

Whilst standard IT across museums and archives are supported by Bristol City Council IT Services, a growing contingent of specialist hardware, software and data architecture are developed and supported by the digital team. Development,

maintenance and supporting these systems is critical to efficient functioning of several operational processes including learning bookings, performance management, collections management and also public facing systems in galleries including digital signage. This will require a range of skills in both deploying, troubleshooting hardware to data modelling according to new business processes. Where we develop new solutions in house we shall look to the open source community for low cost solutions and also release our own developments back to the community. We recognize that we will need external help for many specialist systems e.g. collections management and will leverage on-costs through a collaborative approach, acting as testers or advocates in the user group in order to do this.

HARDWARE, EQUIPMENT & SERVERS

With a growing inventory of hardware, we need a system to allow us to keep track of it through exhibitions and across venues.We also need a booking system to allow staff to see what's available when planning events. We currently operate across a range of virtual and physical servers, with different hosting packages. Documentation and risk management of these systems is crucial to operating as usual. We rely on several technical partners to support and upgrade these servers.

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Hardware maintenance	carry out hardware audit and maintain booking system for equipment	All new equipment to be logged on arrival.	the booking system used open source technology with minimal hosting costs	90% of equipment logged on system by end of year 1	AV content designer. Digital staff to maintain the booking system.
Server & database maintenance	coordinate upgrades and routine maintenance	1 major upgrade	£10,000 / year annual support license for EMu	yearly	Digital manager & documentation staff

Improved IT infrastructure	Migrate to new EMu server with improved storage capacity and develop multimedia ingestion procedures based on optimising network speeds	20tb storage available		2018-2019	Digital Manager, BCC IT, Axiell support
Improved IT infrastructure	Review performance of current systems in line with the product roadmap for EMu. Investigate web based systems for hosting and back end management of the EMu client.	1gigabit upload speeds	BCC time & help from networks team in testing speeds	2020-2021	Digital Manager, BCC IT, Axiell support
Improved IT infrastructure	Write project plan for next migration to new collections management infrastructure based on current industry trends e.g. cloud hosting, open source solutions or different database engine.			2021-2022	Digital Manager, BCC IT, Axiell support

DATABASE MANAGEMENT

Good data practises are essential in order to manage business workflows, achieve compliance and gain valuable insights. Data skills and principles should be shared where possible across the following main areas:

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Conform to GDPR	Develop CRM procedure and guidelines as per CRM roadmap	25% reduction in personal data held on shared drives per year over 4 years	£4,500 annual license costs for cloud based CRM system	2019 – decommission personal data stores on shared drives 2020 – ongoing improvements to CRM procedures	Head of Digital with managers across the service
Volunteer data management	Import legacy volunteer information into the CRM	3000 volunteer records imported	As above	2019	Head of Digital & volunteer coordinator with admin support
Schools contact management	Use the CRM to track engagement with schools, addresses and enquiries	All Bristol schools to have contact history and a minimum of information		2020	Learning support staff
Maintain SPECTRUM standards	Review field data definitions across collections management	All records to achieve minimum standards for		2020	Curatorial and documentation staff

	systems	documentation			
Maintain performance data	Coordination of gathering performance data and maintaining associated systems.	All teams familiar with inputting 5their monthly kpis into the new system	£10/month hosting costs (Digital Ocean virtual server)	monthly	Digital team

REVENUE

Digital systems including hardware and software are key to revenue generation on-site and online across our museums and archives, through donations, ticketing, retail and licencing. The digital team play a key role in the sourcing, setup and maintenance of these systems including troubleshooting and supporting staff in their use, both on the shop floor and in the back office where we are developing new ways to interrogate retail date and make use of cloud technologies.

Ticketing & Retail

Responsibilities: the digital team develop and maintain systems for ticketing in collaboration with external developers. These are in a constant state of flux as exhibitions pricing models develop and change. We aim to make gradual improvements to these systems in line with the visitor experience, and to consolidate the data we gather from these in line with data protection. Digital activity permeates online and offline retail and separate strands of digital work exist for each. Online we have an appetite for experimentation and will run a series of projects to test how content and design affect conversion rates.

Digital Objective	Key Activities	Targets	Resource	Deadlines / Milestones	Responsibility
Refine retail business workflows	Develop new reports for shop management to reduce time taken to order replacement stock	Reduction in cost-per-transaction due to imported speed of ordering		yearly	
Online shop	manage the online shop content, stock, interface	Online shop to take 3% of retail revenue	Costs of shopify are £1500 per shop over 3	End of 2019	Digital and user research team

			shops		
Marketing	marketing campaigns for online retail /· Facebook advertising + A/B testing	online retail to make up 3% of sales		by end of year 1 with incremental growth	User researcher digital engagement
Product development	Write new product descriptions and photograph all new stock	All products over £5 to be available online		monthly	Digital apprentice
POS software / hardware	Maintenance and troubleshooting of equipment and training of retail staff in new POS devices		Retail budget		AV content designer
Online ticketing	Make improvements to systems for ticketing to drive more online sales and reduce the time taken for visitors to buy tickets	10% tickets to be sold online for each exhibition		Yearly increase in volume of online ticket sales	User research and exhibitions teams

Digital only services	Develop processes to provide digital services online e.g. image sales and membership / gift packs	10% increase in take up		Yearly increase in volume of online services	Digital and development teams