



Project no. 727040

GIFT
**Meaningful Personalization of Hybrid Virtual
Museum Experiences Through Gifting and
Appropriation**

Horizon 2020

SC6-CULT-COOP-2016-2017

CULT-COOP-08-2016

Virtual museums and social platform on European digital
heritage, memory, identity and cultural interaction.

Start date: 1 January 2017. Duration: 36 months

D4.4
The GIFT Framework

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Lead beneficiary: IT University Copenhagen

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Project Consortium

Beneficiary no.	Beneficiary name	Short name
1 (Coordinator)	IT University of Copenhagen	ITU
2	Blast Theory	Blast Theory
3	Next Game	NextGame
4	University of Nottingham	UoN
5	Uppsala University	UU
6	Europeana Foundation	EF
7	Culture24	C24

Dissemination Level

PU	Public	X
CO	Confidential, only for members of the consortium (including the Commission Services)	
EU-RES	Classified Information: RESTREINT UE (Commission Decision 2005/444/EC)	
EU-CON	Classified Information: CONFIDENTIEL UE (Commission Decision 2005/444/EC)	
EU-SEC	Classified Information: SECRET UE (Commission Decision 2005/444/EC)	

Type

R	Document, report	X
DEM	Demonstrator, pilot, prototype	
DEC	Websites, patent filling, videos, etc.	
O	Other	
ETHICS	Ethics requirement	

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1. Introduction

This report presents the GIFT Framework, which is a website called the GIFT Box at: www.gifting.digital. The site contains all tools, recommendations and other relevant knowledge developed in the GIFT project, formatted in a way to be practical and applicable for museum professionals. The report explains the design rationale and process, presents the website and contains an appendix with an overview of the entire website and most of its content.

2. Designing the website

2.1 Design rationale

The main purpose of the GIFT Framework is to extract tools and recommendations from the project, and present them in a format that is practical and applicable for lead users. In order to achieve this, we have carried out a user-centered, iterative design process in which target users have been extensively involved through a number of tests and evaluations. In particular, we have often involved ARM participants to give feedback on early designs.

In accordance with the communication strategy and the updated dissemination plan in the P1 periodic report, the primary target audience is innovators working within the cultural heritage sector. Secondary target audiences include professionals working in the creative and cultural industries (CCI), researchers/students, and policy makers.

The involvement of lead users in the design process has led to an ever increased priority on presenting results from the project in a way that is immediately understandable, useful and appealing for these users. This has demanded a process of simplifying and prioritising content, in such a way that the website looks quite different from most H2020 project websites. Simply put, our users have made it clear that they need information that is short, straightforward and to the point. For this reason, the website puts primary emphasis on presenting the tools and recommendations from the project and giving the users the information necessary to understand and use these, in as few words as possible.

This entails that the website at gifting.digital should not be viewed as a platform for reporting project results to the EU commission, and not even (primarily) for communicating about the project to the broader public. Rather, the website is quite strictly oriented towards our primary target audience. On the other hand, a separate subsection of the website is dedicated to communicate more broadly about the project, including towards academic audiences, policy makers and others searching for in-depth information. This section is accessed via the navigation link called "About", and aims to present comprehensive and

detailed information about the GIFT research project, including all project deliverables that have been published in CORDIS.

Part of the rationale for this design is that it supports a longer lifespan for the website. Information about the project is by necessity dated, and will quickly become less current once the project has ended. However, as the website gives primary visibility to the project results that are directly useable by our target audience, this design will support dissemination and exploitation of results also beyond the timeline of the project.

2.2 Design process

As described in deliverable D7.3, the project has had a website since before the official start of the project. From its first creation to its finalisation, the website has been continually updated and iterated. It has been online and published throughout the process, since it has been our ambition to follow an agile and open approach and gather as many insights as possible.

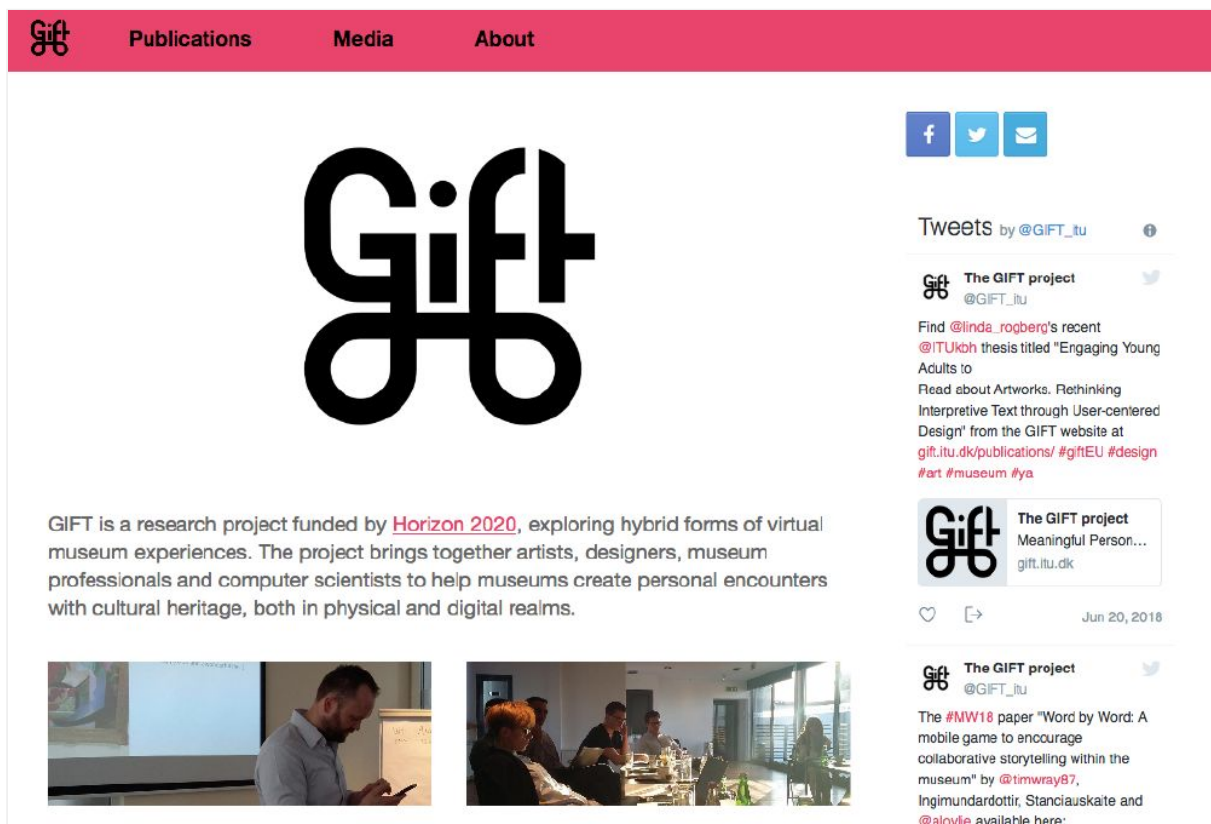


Figure 1: An early version of the project website presented in D7.3, 29/06/18

D7.3 describes the first iterations of the project website, and outlines plans for a redesign that would combine the early project website at gift.itu.dk (Figure 1) with the experimental

toolkit and framework presentation at gifting.digital. In this report we document this process, as outlined by the following milestones:

- 17-19 Jan 2018: Design Workshop
- 5-6 Feb 2018: First Evaluation of Tool Templates
- Feb-May 2018: Design of Tool Pages
- 31 May 2018: Evaluation of Tool Pages
- Jul-Nov 2018: Design Revision for Tool Pages and Framework Website
- Nov 2018: Launch of Open Beta of the Framework Website (v 0.1)
- 26-27 Nov 2018: Evaluation of Open Beta of the Framework Website (v 0.1)
- Dec 2018 - Mar 2019: Revision of Open Beta of the Framework Website (v 0.2)
- 22 Mar 2019: Evaluation of Open Beta of the Framework Website (v 0.2)
- Mar-Jun 2019: Further Revisions to the Framework Website
- 9 Aug 2019: Joint workshop with ITU and Culture24
- Aug-Dec 2019: Final design and dissemination

2.2.1. Design Workshop

17 - 19 January 2018

A joint workshop was organised by IT University of Copenhagen (ITU) with participation from the University of Nottingham (UoN), discussing plans for merging the project website at gift.itu.dk with the toolkit website at gifting.digital, and coordination between the teams. At this workshop the ARM team presented initial insights from the first phase of ARM, in order to ground the design process in the needs of museum participants. The framework team discussed strategies for ensuring the viability of the framework past the project period, and agreed on working arrangements and coordination between the ITU and UoN teams.

2.2.2. First Evaluation of Tool Templates

5 - 6 February 2018

A consortium meeting was held at CAOS - Centro Arti Opificio Siri in Terni, Italy, in parallel with the second ARM workshop. During this meeting, we discussed initial sketches for the website and decided how our museum partners would participate in its evaluation. We decided which tools should be presented within the framework, and how they were to be presented.

From these discussions we devised a number of key guidelines that ensure that the tools are presented in a way that would be most useful and relevant for museums. Some of these guidelines were as follows:

- The website should demonstrate the steps that museums need to take in order to adopt the tool.
- The website should not merely be a repository for “technology demonstrations”, but aim to document how the tools can be used to facilitate visitor engagement with objects and collections.

- The website should document the technical and practical requirements of each tool, and how a museum could adapt or adopt a tool with limited technical support and resources.

Based on these guidelines, initial wireframes of some of the tool pages were developed.

General GIFTING app

A tool for museums to allow their visitors to make and give digital gifts to one another from the items of the museum collection.

Case study carousel with facts over photos

In our study at This and That Museum we found visitors would engage deeply so and so with the we had designed around collection of those and those items.

“Ooh what a great gift I got from my sister. It reminds me to think about cultural heritage every day”

Gifting as relating

Gifting is a powerful mode of relating, and a central mode of being, known in all cultures. Drop theory references here (Author 1933; Another 2016).

Studies show that through gift making and giving, people can experience about not just fun things, but also difficult topics in transformative ways (Review 2012). It is pretty obvious I am just really making this text up. When properly curated, gifting deepens visitor engagement in museums (Study 2013).

SAFE

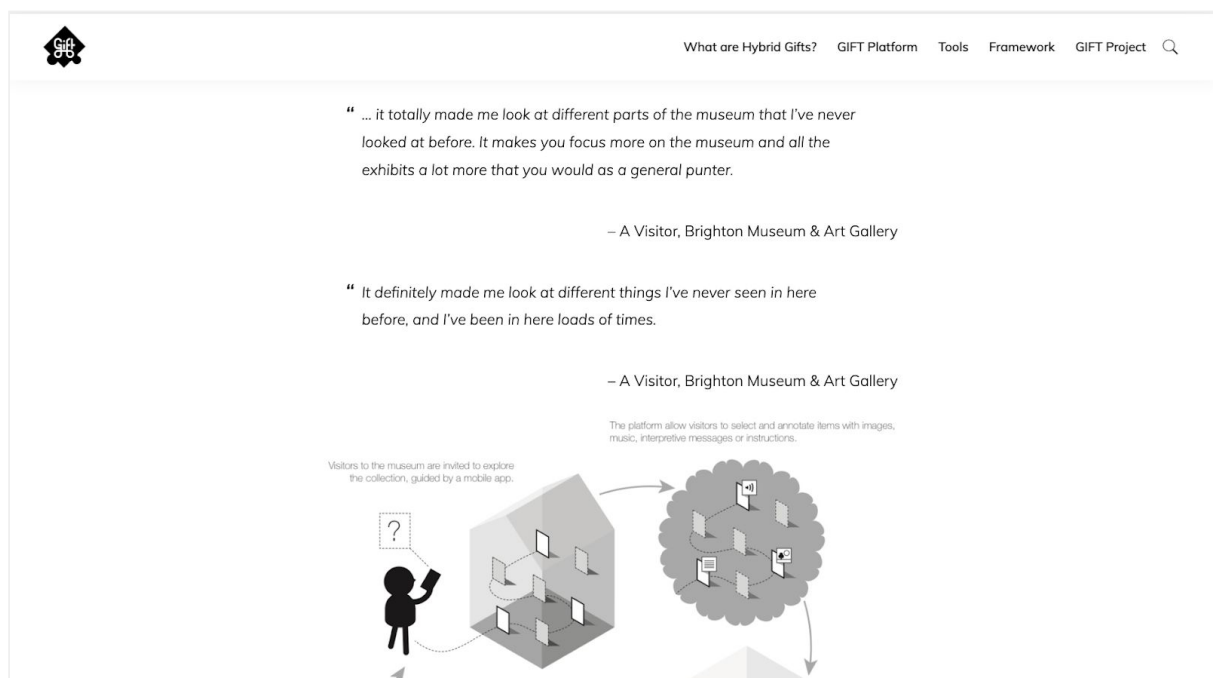
Using the easy tools of the GIFTING app, you remain in control of user generated content

Initial wireframe of a tool page, incorporating guidelines and recommendations from our museum partners.

2.2.3. Design of Tool Pages

February - May 2018

An initial version of the website was deployed by University of Nottingham. This version presented some of their tools and associated theory based on the wireframes that were produced in the consortium meeting in February. This website represents the first live, testable version of the framework.



Screenshot of the GIFT Framework website, March 2018, showcasing a tool page that was developed based on the February 2018 wireframes

2.2.4. Evaluation of Tool Pages

31 May 2018

An evaluation of this website was held at the ARM workshop in ARKEN Museum for Moderne Kunst in Copenhagen, Denmark. The purpose of the evaluation was to validate the presentation of the tool templates that were devised in the February workshop. Based on this evaluation, we devised a set of guidelines that dictate how we should present the tools. These guidelines were presented as “questions” that the website should answer:

- What value does the tool provide for us?

- What would the experience of using the tool look like? What are the steps?
- How does this offer an advantage or a solution over existing platforms?
- Are case studies the most effective means of marketing the GIFT tool / framework?
- Why is this really important?
- How do the tools fit into the bigger context / picture of the GIFT project, and of museum practices in general.
- Have you considered a marketing or communications plan for this tool? For example, how could museum staff (front of house staff for example) talk about the tool and bring it to visitors?
- Can the tool be embedded or demonstrated as part of a larger process?
- How would the tool fit into the existing vision, strategy and work practices of a museum?

2.2.5. Design Revision for Tool Pages and Framework Website

July - November 2018

Based on the feedback of the ARKEN workshop, ITU undertook the task of redesigning the website. Particular emphasis was placed on the presentation of the tool pages and how they address the questions contained within the guidelines. A set of content templates for two of these tool pages were designed, allowing the ITU team to collaborate with their partners and establish a standard on how each tool should be presented.

Gift Ideas & Theory Tools & How To Case Studies The GIFT Project

A short title of the project, around 30 characters max.

Gift Exchange App

Let your visitors give a personalised museum experience to someone they care about.

A brief, catch 'byline' no more than 90 characters. Think of this as a 'newspaper headline' for the tool. **The byline should explain briefly the kind of visitor experience the tool could support, or the immediate benefit of adapting or adopting this tool / process.**

A link to a call to action so that the digital enthusiast can try the tool. We should minimise the amount of steps taken for a user to tangibly try out the tool within the museum.

The Gift Exchange App lets visitors share museum experiences in a more personal and engaged manner than most social media allow. Visitors assemble objects or places in the museum as an 'experience' to gift to someone they care about. The gift is digitally wrapped and sent to the recipient, who can unwrap and experience the gift then and there, or visit the museum to get the full experience.

GET STARTED NOW

Interested? Register with us now and a member of the Gift Project Team will contact you and guide you through the process.

A brief paragraph that explains **how the tool would work** within a museum setting, and if applicable, the **kind of visitor experience** that the tool supports.

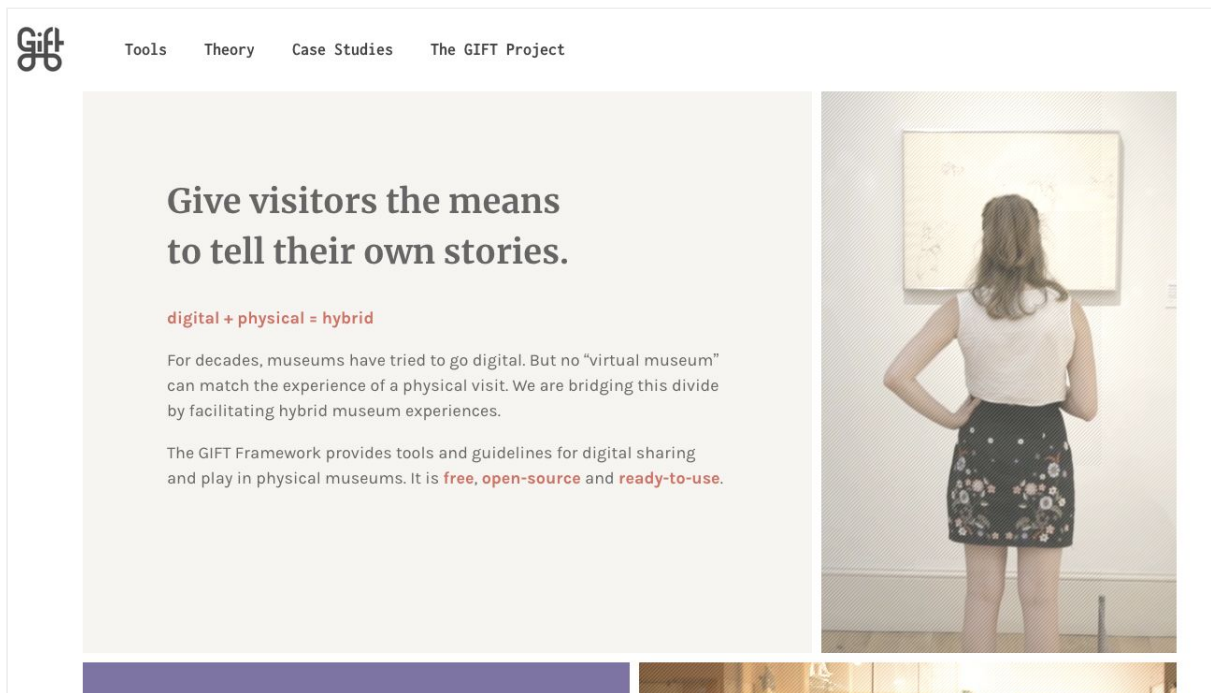
What is the experience like? How can we use it? Why not social media?

Sample content template and guidelines for the Gift Exchange App.

2.2.6. Launch of Open Beta of the Framework Website (v 0.1)

November 2018

A version of the framework website was developed based on these content templates. This version was released as an open beta, where museums could publicly access and give feedback on the website. The website was framed around the concept of the *hybrid museum experience*, and how such an experience could be supported through gifting and play.



Home page of the GIFT Framework website, Nov 2018

Throughout the development of the GIFT Framework, there was much discussion on how the website should be structured, with particular emphasis on its structure and navigation. The open beta version of the website launched in November 2018 consisted of four main sections, accessible via the top navigation menu:

- *Ideas & Theory* - The findings from our initial workshops and evaluations in February and May of 2018 suggested that museums would prefer to understand the deeper meaning and purpose behind the tools that were developed in the framework. Museums might perceive these tools as being “too shallow” if the website does not effectively represent *why* these tools should be used.
- *Tools & How To* - Links to the actual tools used within the framework, and how you could deploy these them in your museum.
- *Case Studies* - Links to case studies and examples where the tools have been deployed, and the lessons learnt.

- *The GIFT Project* - A link to the GIFT Project website, documenting general information about the project, publications and press.

2.2.7. Evaluation of Open Beta of the Framework Website (v 0.1)

26 - 27 November 2018

An evaluation of this website was held at the ARM workshop at the Munch Museum in Oslo, Norway. The purpose of the evaluation was to validate the open beta of the framework website, and to collect further feedback from ARM participants.

Whereas previous evaluations have focused on the presentation of individual tools, this evaluation focused on the overall structure, form and message of the website: its navigation, tone of voice, and target audience.

The main findings of the evaluation are as follows:

- The overall visual and aesthetic treatment of the website was well received, although participants noted that the experience needs to work consistently well for both desktop and mobile devices.
- Language and the choice of wording - especially for headlines and navigation items - is extremely important. The website should be presented in the language of the target audience, which at this point, was very unclear.
- There was some confusion about the choice of wording within the menu items, e.g. "Ideas & Theory" : what's the difference between an "Idea" and a "Theory"? Some of the menu items appeared vague, or they made little sense in context of what they represented.
- Many of the tools, and the framework in general, are presented in isolation. How do the tools and/or framework work in a broader context? The framework needs to be relevant: at present, it appears to "speak to itself."
- The site overall lacked a clear overview of its purpose, and why the visitor should explore further.
- Some participants noted that the site was too image-heavy, and would prefer to engage with concise and meaningful textual content.
- Some concerns were raised regarding the accessibility and visual legibility of some links and visual elements.


Participants also noted that it was very important to test the framework to participants and museum partners who are **not** familiar with the project, so as to assess first impressions.

Throughout this evaluation, it was clear that the framework needed to develop a stronger value proposition to its target audience, and to carefully consider the terminology used for its primary navigation.

2.2.8. Revision of Open Beta of the Framework Website (v 0.2)

December 2018 - March 2019

Following the November 2018 evaluation, a number of changes were made to the site's content, structure and design. Additional tools, theory and case studies were added to the site, and we have tested a number of iterations on how to best present the site's navigation.


 Design Change Adopt Adapt


Give visitors the means to tell their own stories.

digital + physical = hybrid

For decades, museums have tried to go digital. But no 'virtual museum' can match the experience of a physical visit. We are bridging this divide by facilitating hybrid museum experiences.

The GIFT Framework provides tools and guidelines for digital sharing and play in physical museums. It is **free, open-source** and **ready-to-use**.




 Tools Theory Case Studies

The One Minute Experience

Create engaging and easier to read interpretive texts for your museum.

The One Minute Experience is an authoring kit that allows anyone - including inexperienced writers - to easily write their own stories based on the artworks they see in the museum. The kit provides a series of templates and guidelines that are designed to support the creation of interpretive texts that would appear on a visitor's mobile device while visiting the museum. It provides a means of authoring text in a way that engages and connects visitors to your objects.



[GET THE AUTHORING KIT](#)

We provide both two versions of the kit: an interactive, prototypable version and a printable paper-based version.

The home page (top) and a single tool page (bottom), each showing variations of the site's navigation.

2.2.9. Evaluation of Open Beta of the Framework Website (v 0.2)

22 March 2019

An evaluation of this website was held at the Danish Museum of Science and Technology in Elsinore, Denmark. Participants of the ARM workshop were asked to comment on specific tool pages from the framework with the intention of providing feedback based on the use of language, tone of voice, and the relevance of the tools as presented by the website. Some of the main points from the workshop were centred around:

- The use of language and text: many participants stated that the text appeared overly formal, academic, verbose and difficult to read. Participants stated that they would prefer a presentation of tools that was simple, straightforward, visual and easy-to-read, with strong evidence on how the tool could support visitor engagement within the museum.
- Participants noted that the tools “tend to speak to themselves”: it was clear to some participants that the tools were presented as conceptual prototypes rather than deployable or implementable products that could be readily adopted by a museum.
- Participants stressed that the tools should describe the type of visitor experience they could enable and/or describe how the tool could support the bigger organisational purpose of the museum.

In addition, Culture24 ran an advocacy exercise that evaluated the overall purpose and framing of the site. See the Evaluation Report (D4.5) for further details.

2.2.10. Further Revisions to the Framework Website

March 2019 - June 2019

Following the Mar 2019 evaluations, additional tools from ARM and the University of Nottingham were added to the website. There were also efforts to revise the content, language, framing and tone of voice.

2.2.12. Joint workshop with ITU and Culture24

9 August 2019

A joint workshop was held at ITU, with participation from Culture24. The workshop was structured as follows:

- A summary of findings from Culture24's evaluation (see D4.5).
- A state-of-the-art analysis of two similar websites: one from a similar Horizon 2020 research project, and another from a design agency that offers consultancy services to museums.
- A discussion of the strengths and weaknesses of these websites, and how they compare to the GIFT framework.
- A joint discussion on how we can improve the overall navigation and framing of the GIFT framework. These discussions led to the "tagline" of the website - "Tools and ways of working to help museums make richer digital experiences for their visitors" - and ultimately its final design.

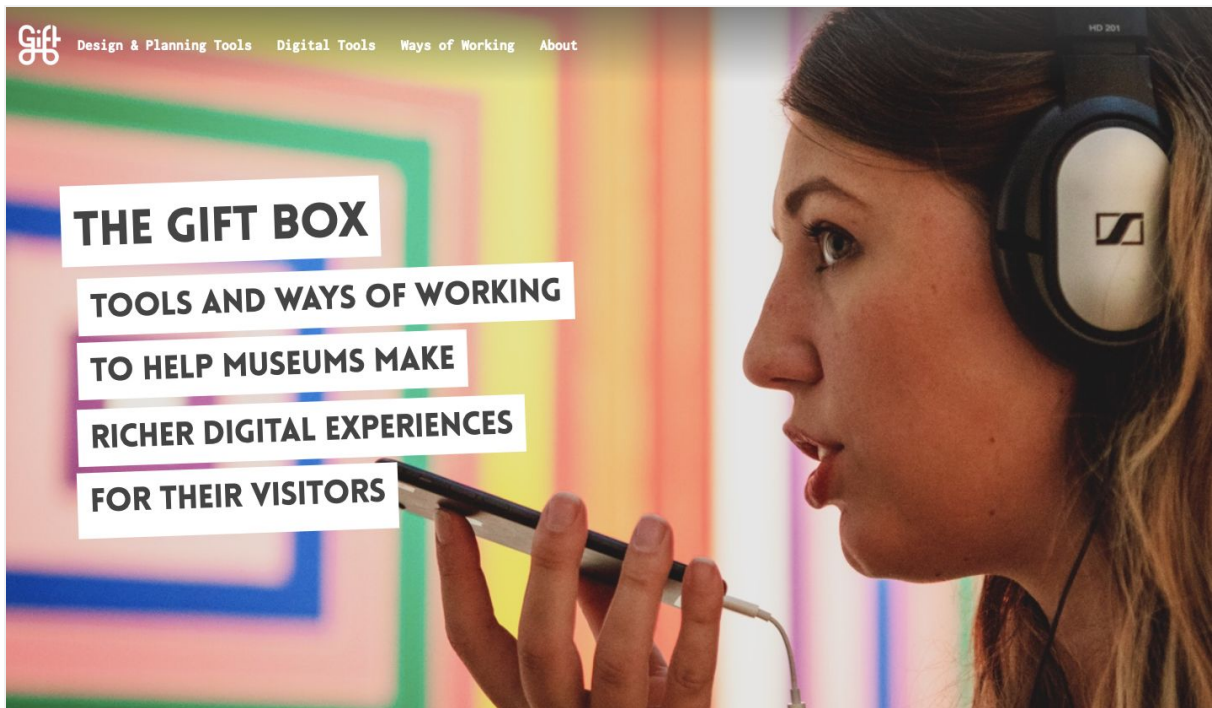
2.2.13. Final design and dissemination

August to December 2019

Through August to October, decisions and ideas from the workshop in August was used to develop and implement the final design. From October to December, remaining deliverables from the other work packages were added to the site, with only minor changes to the design. In November 2019, ITU, C24 and Europeana collaborated on running an online survey at the website (see D4.5) and a dissemination push was launched by Europeana (see D7.4).

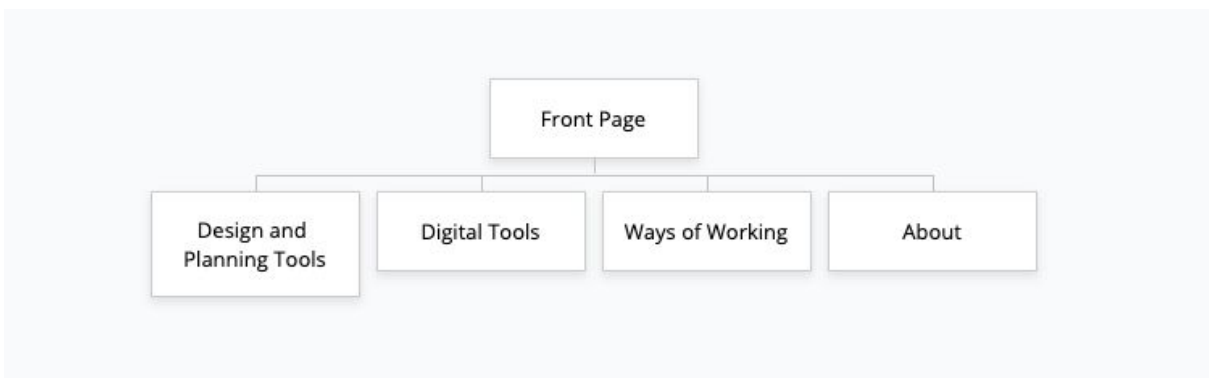
3. Presentation of the website

The following presentation of the website is a light walkthrough that introduces the overall site structure and shows examples of the content. For a more detailed investigation, please see the appendix, which contains an overview of the entire website, a pdf version of all the site's pages as well as a conference paper about the framework published at Museums and the Web 2019.



Top of the front page: www.gifting.digital.

The website URL is: www.gifting.digital. The site consists of a front page and 4 section pages with subpages, mirrored in the site menu.



Simple sitemap: Top navigation.

3.1. Front Page

The Front Page presents the site and gives an overview of the four sections. It also provides different ways to access content by linking to section pages and to section subpages.

What's in the GIFT Box?

Design & Planning Tools

Are you planning to create a digital visitor experience? Use our tools to generate, strengthen and test your ideas. The tools help you develop richer experiences and save time and money.

[Learn More ...](#)

Digital Tools


Looking for inspiration to create more personal experiences? Try our free and open-source tools that let visitors gift experiences, reflect in one minute and much more.

[Learn More ...](#)

Ways of Working


We gathered 10 prominent museums and asked them to experiment and reflect. The result is a set of recommendations that might inspire you to work differently.

[Learn More ...](#)



Front Page: Links to section pages.


Digital Tools



Gift

With Gift, you use your smartphone or tablet to create a digital gift. It's like a playlist or a mixtape, except with objects from a museum.


[Learn More ...](#)



Never Let Me Go

Let two visitors guide each other's encounters with art. Through questions and prompts, Never Let Me Go fosters playful introspection.


[Learn More ...](#)



Emotion Mapper

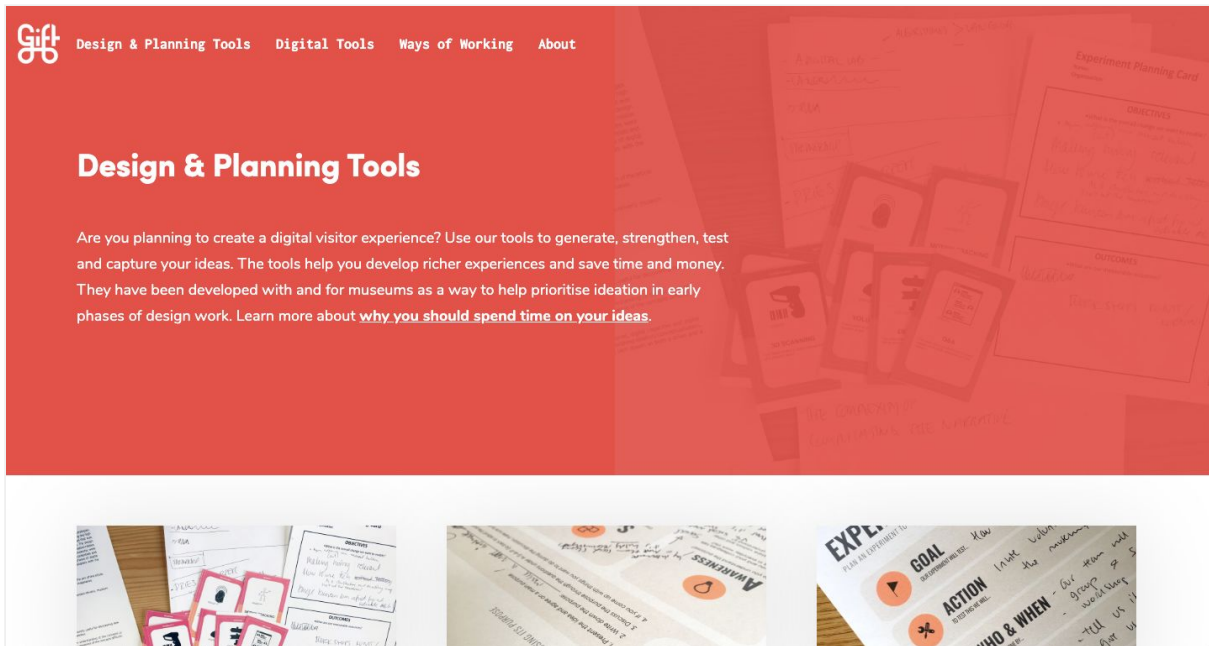
With Emotion Mapper, you can gather input about visitors' emotions and visualise their responses.

[Learn More ...](#)



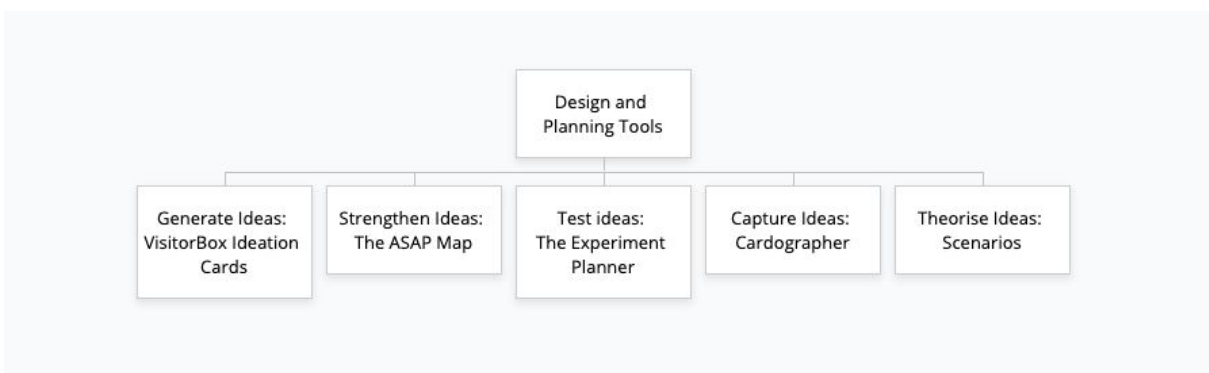
Front Page: Links to tool pages.

3.2. Design and Planning Tools



Top of the Design and Planning Tools section page.

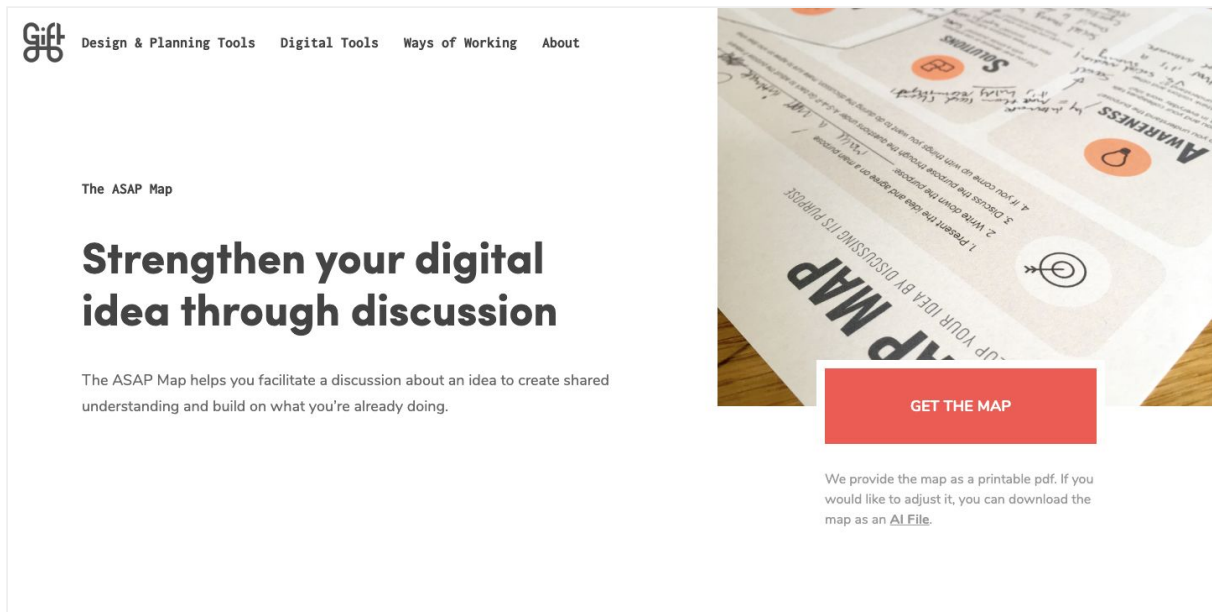
The section page briefly presents the Design and Planning Tools section and links to subpages of the section. The section contains 5 main subpages, each presenting and providing a design and planning tool and linking to additional subpages.



Simple sitemap: The Design and Planning Tools section.

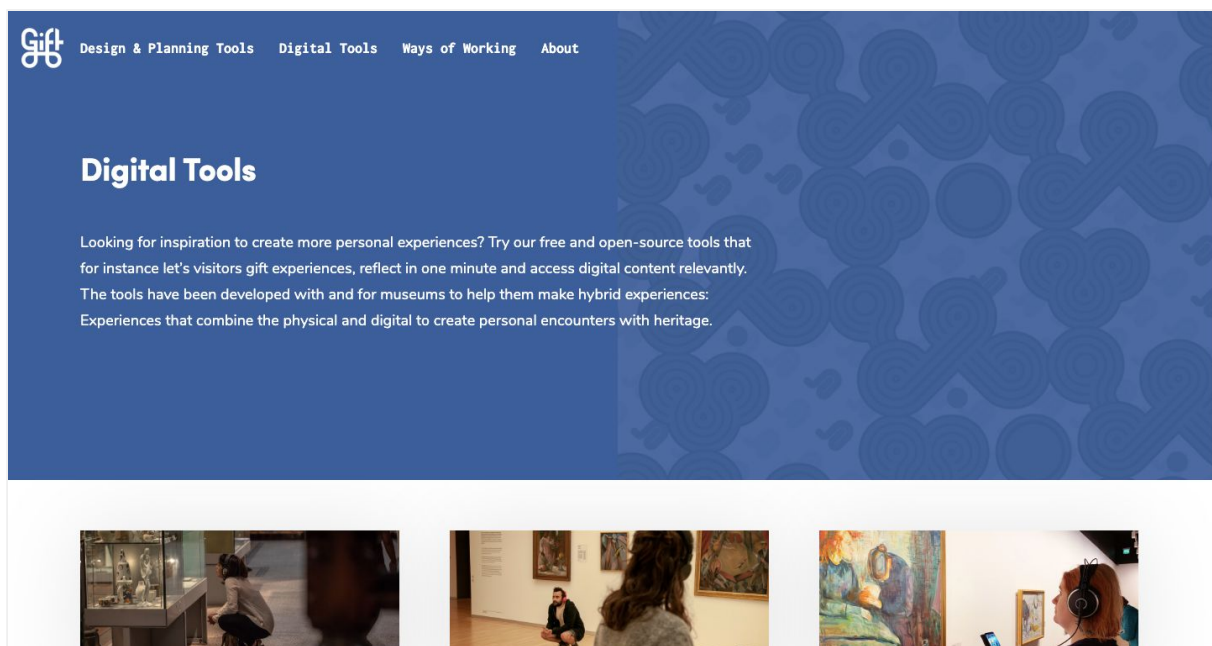
Each of the main subpages contains a short introduction to the tool, photos of the tool, information on when, how and why to use and implement the tool, quotes from users, and

links to additional subpages (for instance containing case studies or downloadable materials) and/or insights about the tool (linking to articles, blog posts or similar).



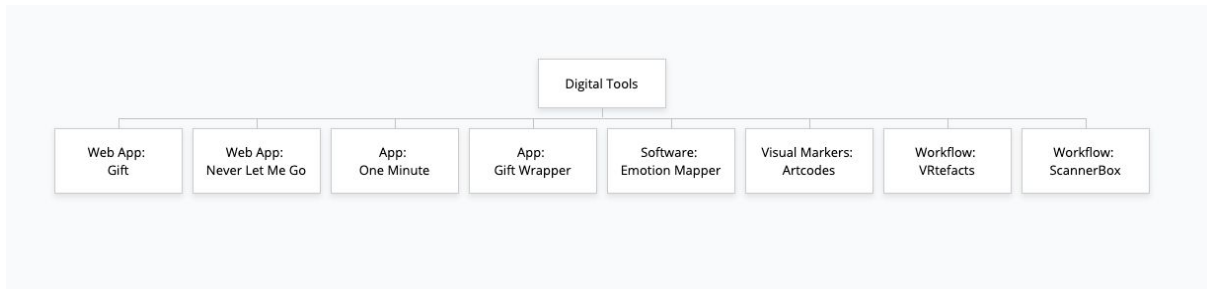
Top of one of the Design and Planning Tools subpages: The ASAP Map.

3.3. Digital Tools



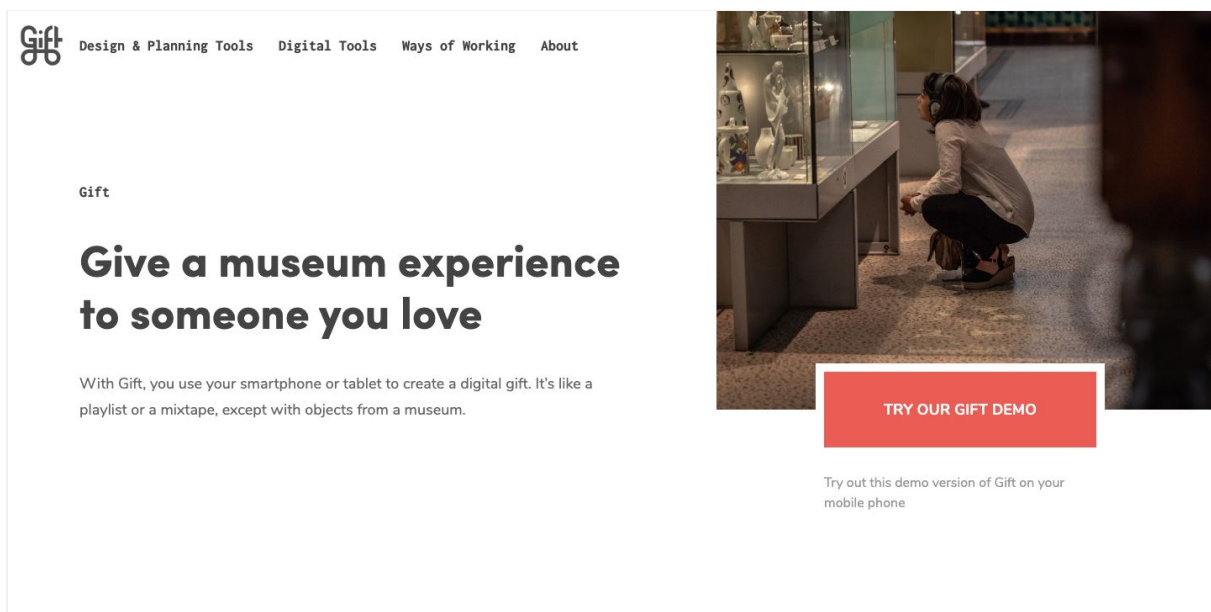
Top of the Digital Tools section page.

The section page briefly presents the Digital Tools section and links to subpages of the section. The section contains 8 main subpages, each presenting and providing a design and planning tool and linking to additional subpages.



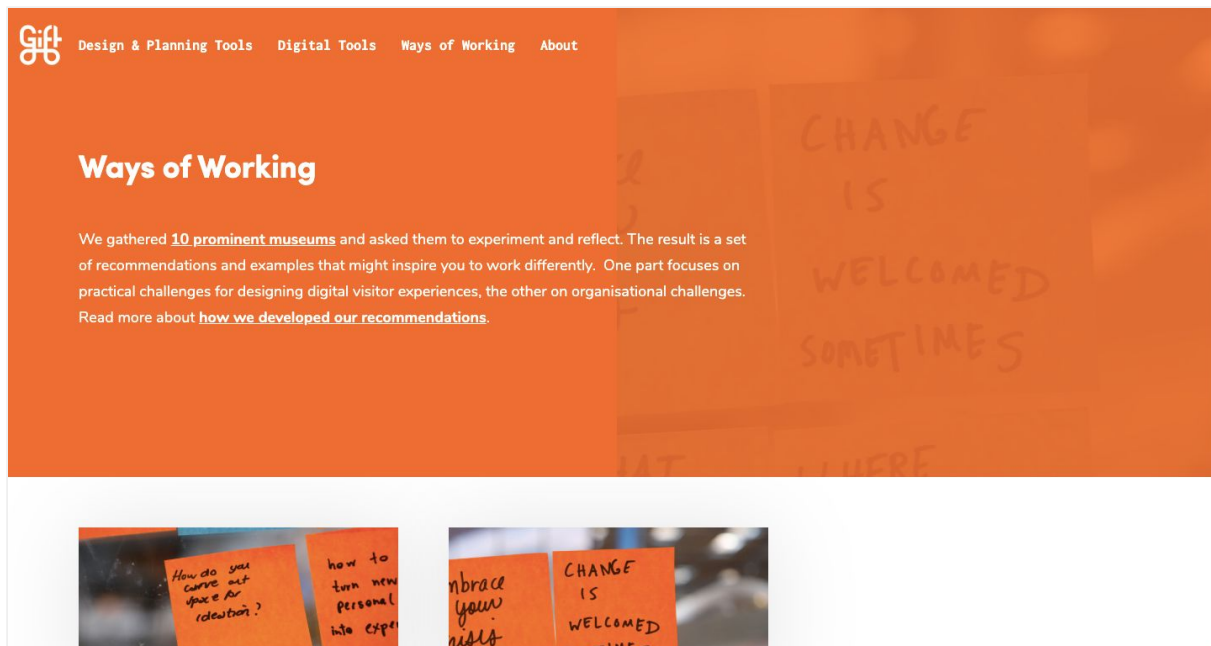
Simple sitemap: The Digital Tools section.

Each of the main subpages contains a short introduction to the tool, photos of the tool, information on when, how and why to use and implement the tool, quotes from users, and links to additional subpages (for instance containing case studies or downloadable materials) and/or insights about the tool (linking to articles, blog posts or similar).



Top of one of the Digital Tools subpages: Gift.

3.4. Ways of Working



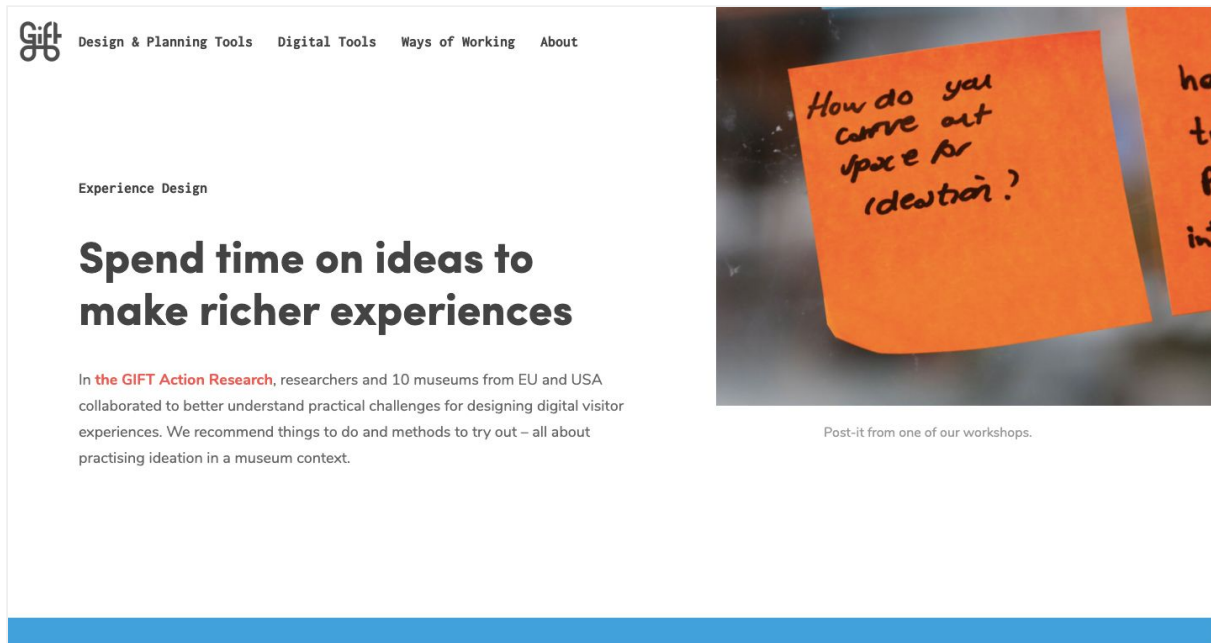
Top of the Ways of Working section page.

The section page briefly presents the Ways of Working section and links to subpages of the section. The section contains 2 main subpages, each presenting and providing a set of recommendations and linking to additional subpages. The recommendations come out of the action research process of the ARM module (work package 4) and focuses on work practices in relation to two areas: Experience Design and Organisational Change.



Simple sitemap: The Ways of Working section.

Each of the main subpages contains a short introduction to the recommendations, photos of post-its from the creation process behind the recommendations, the actual recommendations and links to additional information about the process, relevant tools, experiment recaps, reflection pieces and/or places to explore further.

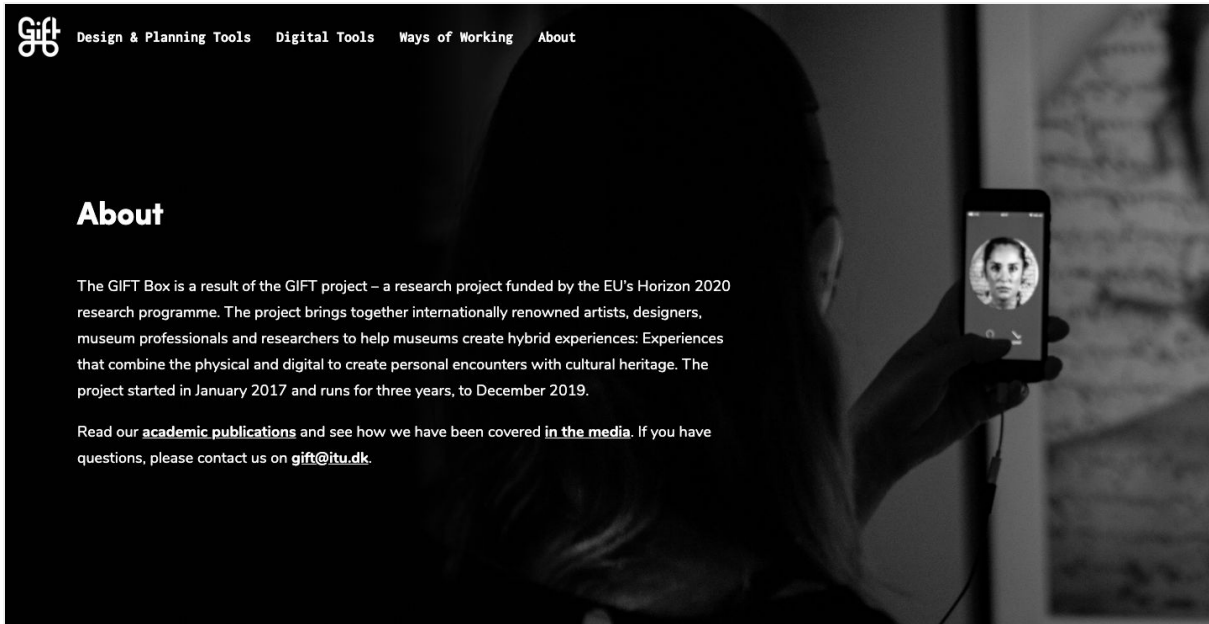


Top of one of the Ways of Working subpages: Experience Design.

3.5. About

This section presents the GIFT Project and contains an iterated version of the previous project website content presented in D7.3. As preambled in D7.3, the content has been moved from www.gift.itu.dk to www.gifting.digital and reworked into the current version. This section of the website presents all public information about the GIFT Project, including links to deliverables that have been published in CORDIS, academic publications and press material.

As described in section 2.1 on the design rationale, this design strikes a careful balance between on the one hand ensuring that all relevant information is available on the project website, while ensuring that the main page is kept free to focus on results.



Top of the About section page.



Simple sitemap: The About section.

The main subpages contain different types of content of relevance to the presentation of the GIFT Project. Furthermore, they link to additional information and materials, such as academic publications, external promotion and project deliverables.

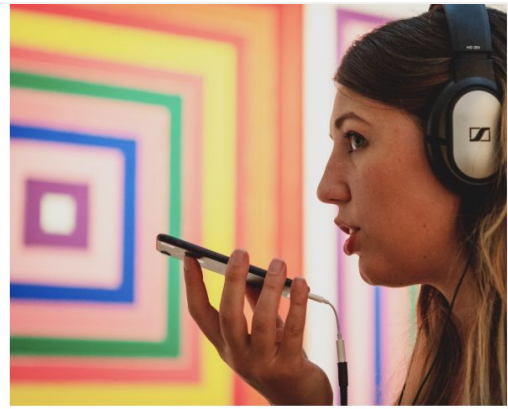


Press Release

The GIFT Box: Helping museums create richer digital experiences for their visitors

The team behind the GIFT project are proud to launch [the GIFT Box](#), a set of free, open-source tools and ways of working to help museums offer richer digital experiences for their visitors.

Aimed at cultural heritage professionals, academics, students and those who work in the creative industries, The GIFT Box provides a variety of innovative tools for



Top of one of the About subpages: Press Release.

4. Appendix

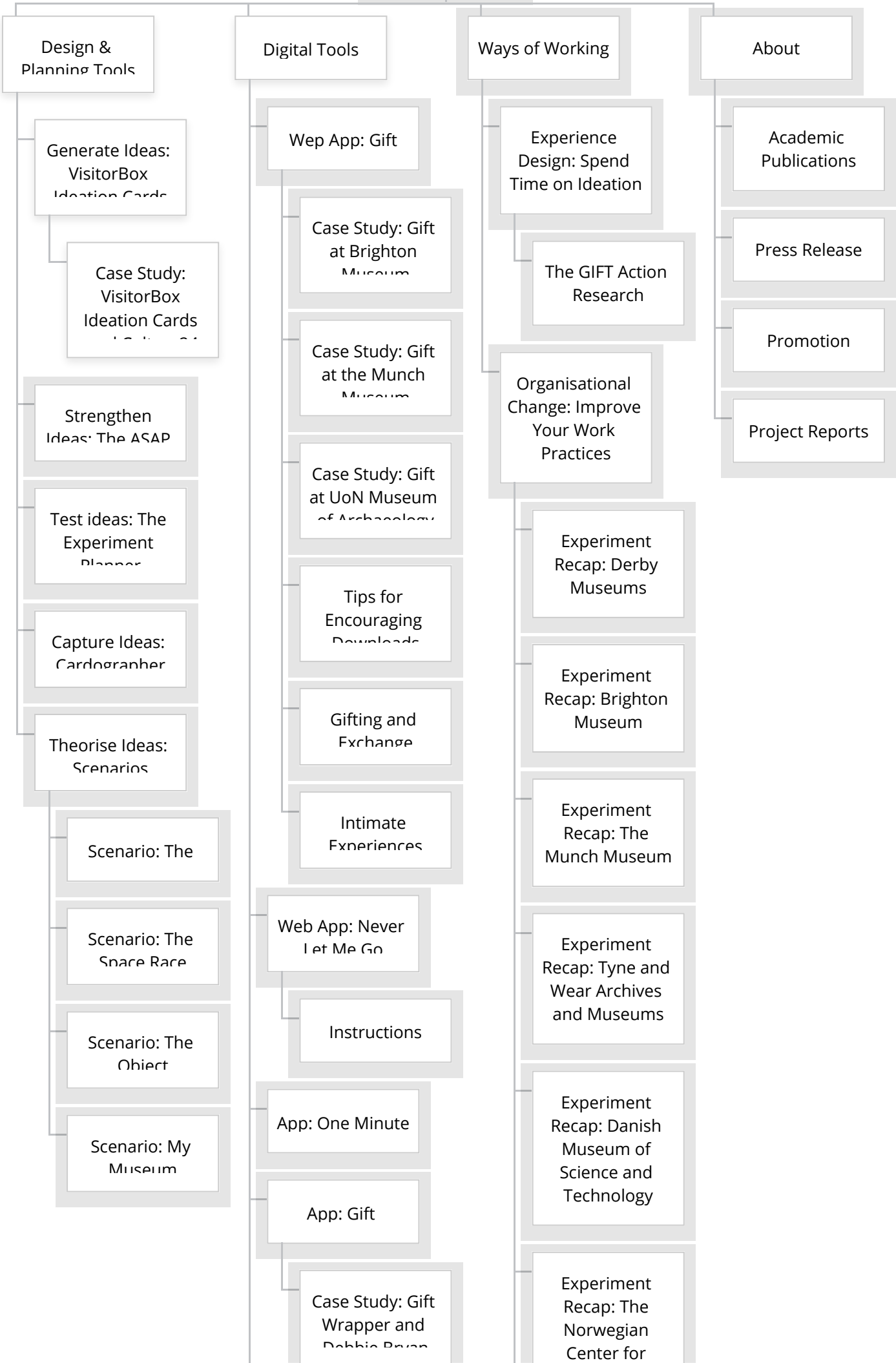
The following pages contain three appendices:

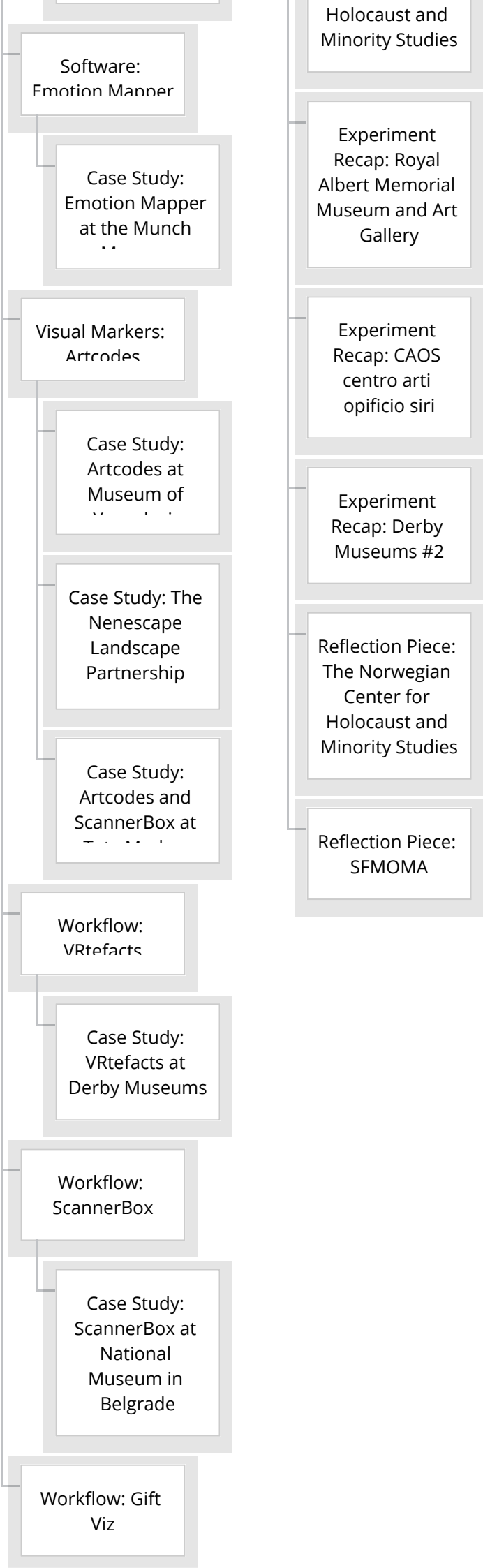
4.1. Sitemap of the entire website

4.2. Pdf version of all pages

4.3. Paper: The GIFT Framework

Front Page







THE GIFT BOX

TOOLS AND WAYS OF WORKING

TO HELP MUSEUMS MAKE

RICHER DIGITAL EXPERIENCES

FOR THEIR VISITORS



What's in the GIFT Box?

Design & Planning Tools

Are you planning to create a digital visitor experience? Use our tools to generate, strengthen and test your ideas. The tools help you develop richer experiences and save time and money.

[Learn More ...](#)

Digital Tools

Looking for inspiration to create more personal experiences? Try our free and open-source tools that let visitors gift experiences, reflect in one minute and much more.

[Learn More ...](#)

Ways of Working

We gathered 10 prominent museums and asked them to experiment and reflect. The result is a set of recommendations that might inspire you to work differently.

[Learn More ...](#)



Who are we?

The GIFT Box is a result of The GIFT project – an EU funded research project in which a group of internationally renowned artists, designers, museum professionals and researchers work together. The project runs from 2017 to 2019 and focuses on hybrid experiences: Experiences that combine the physical and digital to create personal encounters with cultural heritage.

Questions? Feedback? We would love to hear from you! Please contact us on gift@itu.dk.

Learn more [about the project](#), or check out our [academic publications](#).

Design & Planning Tools



Generate Ideas

VisitorBox Ideation Cards

Print and play this card game with your colleagues to come up with new ideas for digital experiences.

[Learn More ...](#)



Strengthen Ideas

The ASAP Map

With the ASAP Map, you facilitate a discussion about an idea to create shared understanding and build on what you're already doing.

[Learn More ...](#)



Test Ideas

The Experiment Planner

The Experiment Planner helps you plan an experiment to find out if your idea makes sense and how you can develop it.

[Learn More ...](#)



Capture Ideas

Cardographer

Cardographer is a digital platform that enables you to capture physical card-based design ideas and analyse trends and opportunities.

[Learn More ...](#)



Theorise Ideas

Scenarios

Play a scenario with your collaborators to generate a common understanding of a theoretical concept related to your design idea.

[Learn More ...](#)

Digital Tools



Web App

Gift

With Gift, you use your smartphone or tablet to create a digital gift. It's like a playlist or a mixtape, except with objects from a museum.

[Learn More ...](#)



Web App

Never Let Me Go

Let two visitors guide each other's encounters with art. Through questions and prompts, Never Let Me Go fosters playful introspection.

[Learn More ...](#)

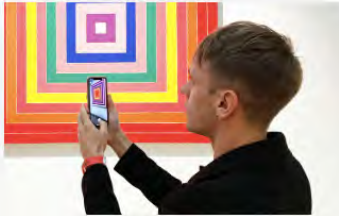


Software

Emotion Mapper

With Emotion Mapper, you can gather input about visitors' emotions and visualise their responses.

[Learn More ...](#)



App

One Minute

One Minute uses image recognition to identify artworks and offer visitors short, bite-size reflections about them.

[Learn More ...](#)



App

Gift Wrapper

With Gift Wrapper, visitors can make a museum gift more personal by adding a link to digital content such as music, photos or videos.

[Learn More ...](#)



Visual Markers

Artcodes

Artcodes lets you blend your physical exhibition with digital content – works like QR Codes, except you design the look yourself.

[Learn More ...](#)



Workflow

VRtefacts

VRtefacts puts visitors into a VR experience where they explore and touch 3D models of museum objects and share stories about them.

[Learn More ...](#)



Workflow

ScannerBox

ScannerBox is a workflow that enables you to generate interactive 3D models of objects in your collection or contributed by visitors.

[Learn More ...](#)



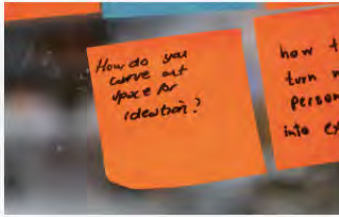
Workflow

Gift Viz

Gift Viz is a workflow that guides you to make insightful visualisations of data captured from gifting experiences.

[Learn More ...](#)

Ways of Working



Experience Design

Spend time on ideation

We recommend things to do and methods to try out – all about practising ideation in a museum context.

[Learn More ...](#)



Organisational Change

Improve your work practices

We recommend things to think about, things to do and things to explore further when you seek to create change across your organisation.

[Learn More ...](#)



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Design & Planning Tools

Are you planning to create a digital visitor experience? Use our tools to generate, strengthen, test and capture your ideas. The tools help you develop richer experiences and save time and money. They have been developed with and for museums as a way to help prioritise ideation in early phases of design work. Learn more about [why you should spend time on your ideas](#).



Generate Ideas

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Print and play this card game with your colleagues to come up with new ideas for digital experiences.

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Strengthen Ideas

The ASAP Map

With the ASAP Map, you facilitate a discussion about an idea to create shared understanding and build on what you're already doing.

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VisitorBox Ideation Cards

Generate new ideas in a fun and inspiring way

VisitorBox Ideation Cards is a card game that you print and play with your colleagues to come up with new ideas for digital experiences.



GET STARTED

Download and print the cards on visitorbox.org.

When to use?

Play the cards whenever you want to generate new ideas, either in early or later stages of designing digital experiences.

How does it work?

Print the cards and bring them to a meeting. You discuss context and goals, create a design brief, generate ideas, disrupt them and think of future steps. With **Cardographer**, you can capture and analyse the ideas.

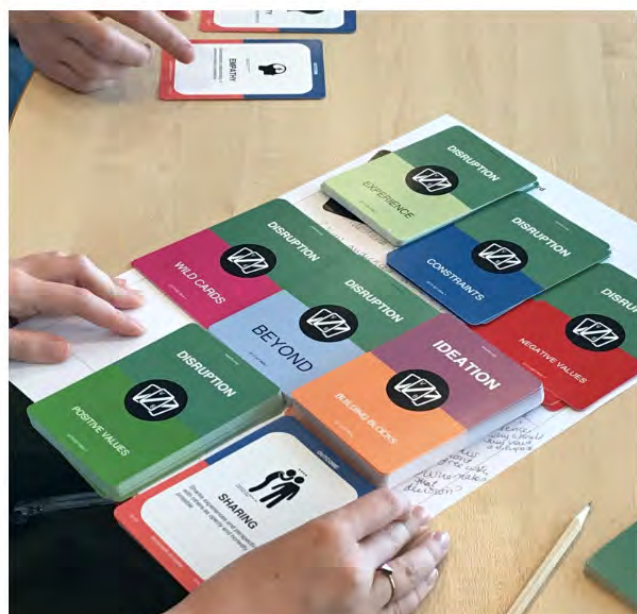
Why use the cards?

Museums that use the cards generate innovative and thoughtful ideas and are able to demonstrate exactly how they determined an idea to be 'good' or 'bad.'

Case Study

Helping cultural organisations generate ideas

See how cultural organisations used the cards to generate different ideas with our partner



[Learn more ...](#)

“

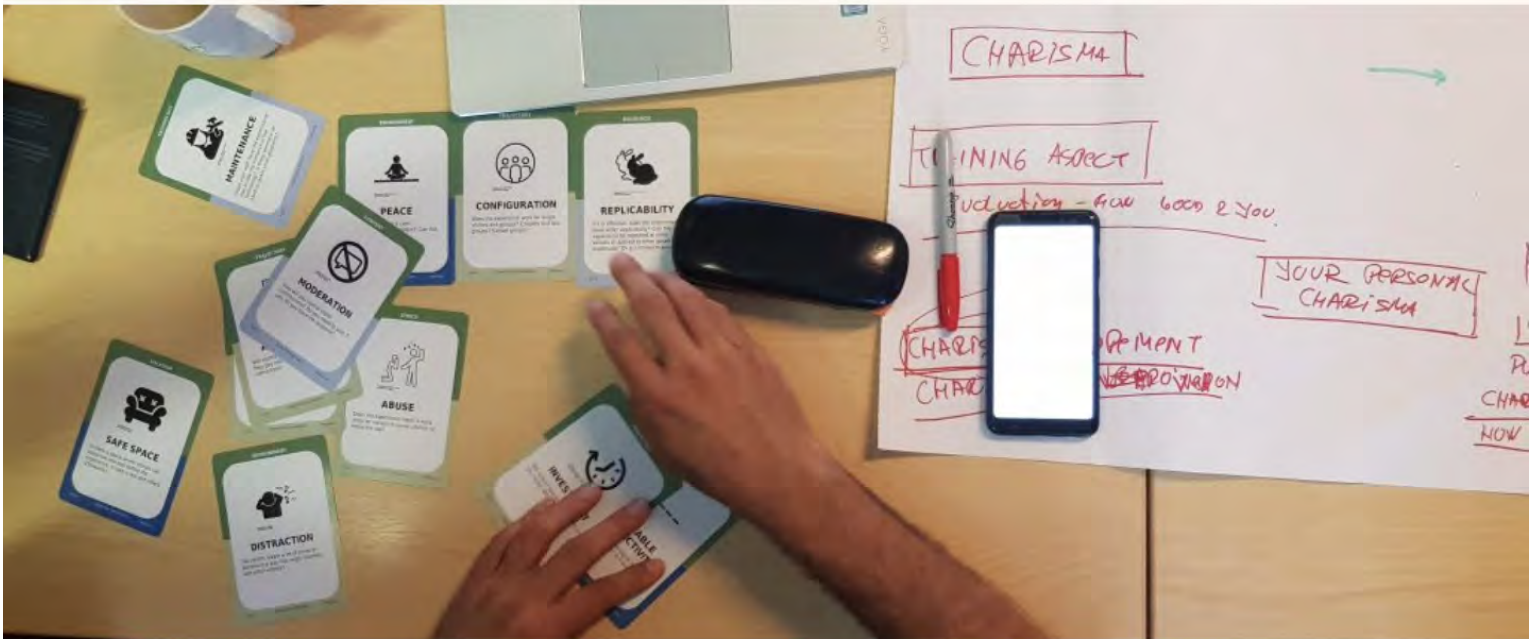
Playing the cards is so much better than brainstorming usually is. There's no awkwardness, and you always feel like you're moving forwards.

- Volunteer, Theatre Royal & Concert Hall, Nottingham

“

It's been a great way to come up with ideas, but what I think is best is that I could show a colleague or a funder that it is a properly thought-out idea. I've already challenged it with the things that could go wrong.

- Museum Learning Officer, Let's Get Real programme



How to use?



Gather a team of staff, volunteers or partners, ideally with a mixture of backgrounds.



Get familiar with the [VisitorBox Activity Rules](#).



Deal a deck of [VisitorBox Ideation Cards](#).

Save and track your ideas

You can use your phone's camera to take a picture of your cards and your design sketches. Based on this idea, we've developed a specially designed tool called

sketches. Based on this idea, we've developed a specially designed tool called **Cardographer** that will scan your cards, save your ideas, and track them over time.

Can the game be customised?

The cards are released for all to use, free of charge. They are designed to make sense for museums, galleries and other cultural venues of all types and sizes. However, the card content and rules are open source, meaning that you can:

- **develop a new custom deck**
- **tailor the card-playing process**

GET STARTED

Credits / VisitorBox Ideation Cards:

Design and Development: University of Nottingham, led by Ben Bedwell.

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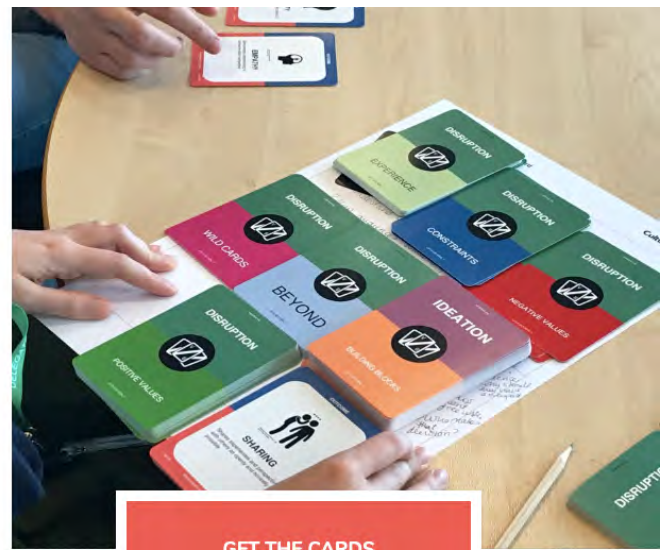
Culture /

Case Study: VisitorBox Ideation Cards and Culture24

Helping cultural organisations generate different ideas

UK based charity **Culture24** have been using the Visitor Box Ideation Cards as part of their **Let's Get Real** programme of action research. They can be useful in a light touch way to spark conversations or for more in-depth planning.

Culture24 used them as part of a two-day workshop where participants came together to be introduced to some low-cost technologies, then used the cards to quickly generate ideas about new ways to engage visitors. The brief was that these ideas should be *different* from their existing visitor engagement offer and not require sophisticated, expensive technology to implement.



[GET THE CARDS](#)

If you would like to try out the VisitorBox Ideation Cards, you can download and print the cards on visitorbox.org.



The group created a wide range of ideas, then focused on a subset of those that seemed feasible, dedicating time to storyboarding these ideas from the point-of-view of a potential visitor. The cards were then used to critique the storyboards, forcing the group to collaboratively problem-solve and improve the ideas.

Culture24 continues to use the cards to help museums develop ideas for digital experiments and have developed two customised decks that are freely available here:

- [Let's Get Real 6: On social impact](#)

- **Let's Get Real 7: On human connections**



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The ASAP Map

Strengthen your digital idea through discussion

The ASAP Map helps you facilitate a discussion about an idea to create shared understanding and build on what you're already doing.



GET THE MAP

We provide the map as a printable pdf. If you would like to adjust it, you can download the map as an [AI File](#).

When to use?

Use the map *As Soon As Possible* when you have an idea for a digital experience. It's like a roadmap that helps you reflect on where you're going and how you can build on what you're already doing.

How does it work?

Print the map and use it to facilitate a discussion. You first present the idea and agree on **the purpose of the idea**. You then discuss the purpose through questions on *Awareness*, *Solutions*, *Alliances* and *Plans*.

Why use the map?

The map helps you create shared understanding and build on what you're already doing. This will strengthen your idea, make on-going collaboration easier and enable you to better explain your decisions.



This is really good for framing a discussion. If somebody comes up with a digital idea, you can use the map to anchor it.

- Kevin Bacon, Digital Manager, Brighton Museum

How do we reframe the discussion to be around what the objective actually is? This kind of contextual thing provides the opportunity.

- Jay Mollica, Creative Technologist, SFMOMA

Insight

Behind the scenes of the ASAP Map

In this research publication, researchers from the **GIFT Action Research** explain how and why the map was created:

“

The ASAP map was developed in collaboration with the 10 museum professionals in the GIFT Action Research. Early in the process, they tested an initial version in their home institutions. Through this test and as a result of two followup workshop sessions with the group, the map was iteratively developed into the final version. (...) In the workshop discussions, the museum professionals highlighted the map as a way to “dig in and give flesh and bone to some fancy stuff” and as a good frame for discussions: “If somebody come with a digital idea, you can use this to anchor it”. Also, they saw it as having a potential for supporting early collaboration, as one of the museum professionals argued: “Without all stakeholders involved from the very start, you’re building in a potential problem further down the line.”

How to use?



Set up a meeting: Invite relevant staff, partners and volunteers.



Print the map and plan how to facilitate the discussion.



At the meeting, use the map to facilitate a discussion. The discussion is *the* outcome.

Idea vs. purpose

- The *idea* is the experience or solution that you imagine to develop.
- The *purpose* is the reason why you should develop it.

Example

An art museum wants to use VR (Virtual Reality) to help elderly people at nursery homes build relationships through art:

- The *idea* is that the elderly person at the nursery home can see artworks through the eyes of a visitor at the museum via VR.
- The *purpose* is to build relationships for elderly people at nursery homes.

But 'to build relationships' can mean many things. This is where the ASAP Map comes in. The map helps you create shared understanding as well as build on what you're already doing – through questions such as:

- How do you understand the purpose?
- How can you build on what you learn from earlier solutions?
- How is the purpose relevant for other teams at your museum?
- How does the purpose fit with future plans and strategies of your museum?

GET THE MAP

Credits / The ASAP Map:

Design and Development: IT University of Copenhagen, led by Anne Rørbæk Olesen.

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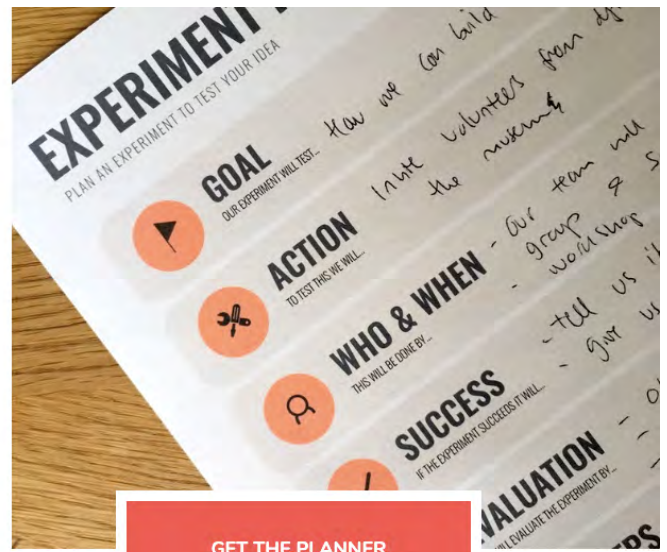
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The Experiment Planner

Test your idea by experimenting

The Experiment Planner helps you plan an experiment to find out if your idea makes sense and how you can develop it.



GET THE PLANNER

We provide the planner as a printable pdf. Print on both sides to get one piece of paper. If you would like to adjust it, you can download the planner as an [AI File](#).

When to use?

Use the Experiment Planner when you have an idea for a digital experience that you would like to test or know more about. See how RAMM ran [an experiment on how to tell digital stories](#).

How does it work?

Print the planner and bring it to a meeting. You first talk about how to test the idea – discuss the questions on the back if you need inspiration. You then fill out the planner and make sure that everyone knows what to do.

Why use the planner?

Test your idea to find out if it makes sense and how you can develop it. This will help you save time and money, make more useful solutions and enable you to better explain your decisions.



The Experiment Planner works really well. Having the questions on the back, those prompt questions, I think that is really helpful.

- Daniel Martin, Head of Curatorship and Curator of Making, Derby Museums

A very good way to communicate internally within your organisation what a project is about. If you show it to another department, it's very clear to them what is going on.

- Nikita Mathias, Project Coordinator for Digital Visitor Experiences, The Munch Museum

Insight

Behind the scenes of the Experiment Planner

In this [research publication](#), researchers from the [GIFT Action Research](#) explain how and why the planner was created:

“

The Experiment Planner was developed in collaboration with museum professionals in the GIFT Action Research. They used a first version of the planner, based on a format from Culture24's Let's Get Real action research methodology, and subsequently gave feedback on iterated versions in two more workshop sessions. In these discussions, the museum professionals particularly highlighted the planner as a means to "help you report the process" and "a good way to communicate plans". Based on their feedback, the backside was added, having questions that offer more support in filling out the planner.

How to use?



Set up a meeting; Invite relevant staff, partners and volunteers.



Print the planner and plan how to facilitate the discussion.



At the meeting, talk about how to test the idea and fill out the planner.

GET THE PLANNER

Credits / The Experiment Planner:

Design and Development: IT University of Copenhagen, led by Anne Rørbæk Olesen, and Culture24 (based on the [Let's Get Real](#) action research methodology).

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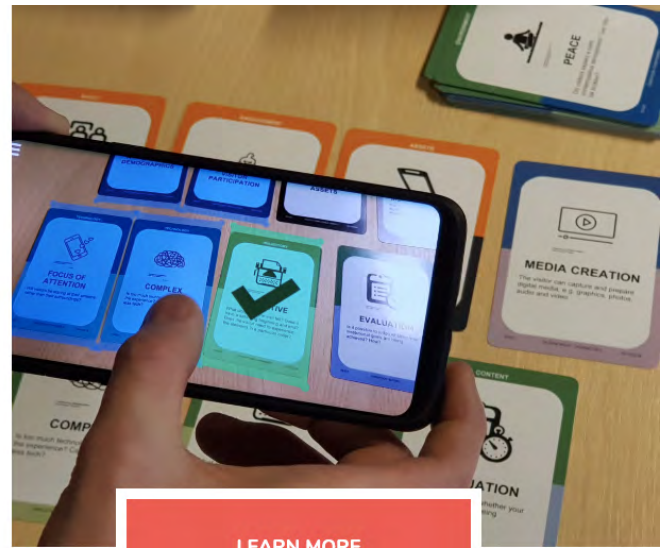
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Culture

Cardographer

Capture and analyse design ideas

Cardographer is a digital platform that enables you to capture your physical card-based design ideas and analyse trends, issues and opportunities.



[LEARN MORE](#)

Learn more about Cardographer at the Mixed Reality Storytelling research site.

When to use?

Cardographer is a supplement to **the VisitorBox Ideation Cards**. The cards help you generate new ideas for digital experiences. Use Cardographer to capture and analyse these ideas.

How does it work?

Download the Cardographer scanner app and follow the instructions. After the session, you can analyse the outcome or simply use it to remember your thoughts and get new members of staff up to speed.

Why use Cardographer?

Cardographer allows you to save your ideas and visualise long-term usage within your institution and among all users. Such insights can help you find strategic gaps and identify untapped opportunities.



Being able to compare my design to all the others at a glance let me quickly see that my idea was using some uncommon approaches.

- Cardographer user

It's a fantastic resource – I can quickly spot gaps in the market and make something that no one has thought of before, or pick a tried and tested design!

- Cardographer user

How to use?



[Download the VisitorBox Ideation Card Deck.](#)



Download the Cardographer app.



Follow the on-screen instructions.

What are the technical requirements?

Cardographer is primarily a web platform, which can run in any browser. The Cardographer scanner app can run on Android and soon on iOS devices. Due to the use of Augmented Reality technology for the card scanning, a device equivalent to a Galaxy S7 or better is required. This is equivalent to an iPhone 8 or higher.

Can the tool work with other decks?

While Cardographer was designed with **the VisitorBox Ideation Card** deck in mind, it can be customised to support any card deck.

How will the tool be supported?

Cardographer is an ongoing project which is currently evolving and forming the basis of several partnerships in industry and academia. With a dedicated team and ongoing funding, Cardographer is set to grow in functionality and maintain support for the foreseeable future.

Credits / Cardographer:

Design and Development: University of Nottingham.

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Scenarios

Reflect on theory through role-playing

Play a scenario with your collaborators to generate a common understanding of a particular theoretical concept related to your design idea.


[GET THE SCENARIOS](#)

Learn more about the 4 different scenarios that we provide.

When to use?

Scenarios are intended for design teams: curators, educators and digital designers who are in the process of designing a new museum experience. They are best introduced early in the process, and are particularly useful before an ideation exercise.

How does it work?

The scenarios can be played in less than 2 hours, and are designed for at least 4 players. The players act out a situation that illustrates a specific theory. This is followed by a debrief, allowing players to reflect on the theory and issues from their own context.

Why play scenarios?

Scenarios are a useful way to generate a common understanding of theoretical concepts that are central to your design idea. They encourage you to see things from different sides and discuss relevant design issues.

Scenarios



Gift-giving practices

The Gift

A scenario dealing with gift-giving. Gifting practices are entangled with museum visits in several ways and can be used as a resource in designing museum experiences. In this scenario, every person takes on a character at a



Social play and games

The Space Race

This scenario is meant to be used by teams designing for games and play in museums. The purpose is to enable a deeper reflection on different ways in which people interact socially in games and play. The scenario also represents



Museum objects

The Object

In this scenario, the participants trace an object from its creation, via the original cultural context, when it is collected, is put on display, and finally archived. The object plays the central role, and the participants play people

family gift exchange party, and all both give and receive gifts.

[Learn More ...](#)

a range of design options and strategies in game design.

[Learn More ...](#)

that for one reason or another come in contact with the object.

[Learn More ...](#)



Interpersonal experiences

My Museum

A scenario where the participants act as the visitors of a museum. Through this scenario, the participants experience the different expectations and social background of different types of visitors and how this affects their interpersonal experience in the exhibition.

[Learn More ...](#)

“

I think that since we often really have this sort of discussions in the museum, it's good to try to see things from the other side and make yourself create arguments for that.

- Curator, playing The Object

“

We so seldom get a chance to reflect on how people actually behave in a museum, it made me think.

- Project Leader, playing My Museum

How to use?



Set up a meeting: Invite relevant staff, partners and volunteers.



Print the chosen scenario and plan how to facilitate the session.



At the meeting, use the scenario materials to facilitate the session.

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Scenario: The Gift

Understand the practices of gift-giving

The Gift scenario deals with gift-giving. Gifting practices are entangled with museum visits in several ways and can be used as a resource in designing museum experiences. In this scenario, every person takes on a character at a family gift exchange party, and all both give and receive gifts.



GET THE SCENARIO

The scenario is available as a pdf. If you would like to adjust it, you can download the scenario as a [Word File](#).

Credits / Scenarios:

Design and Development: Uppsala University

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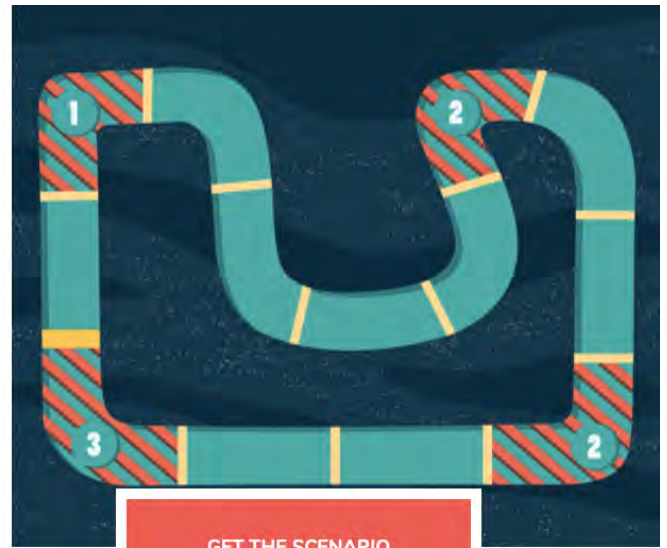


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Scenario: The Space Race

Reflect on social play and games

The Space Race scenario is meant to be used by teams designing for games and play in museums. The purpose is to enable a deeper reflection on different ways in which people interact socially in games and play. The scenario also represents a range of design options and strategies in game design.



[GET THE SCENARIO](#)

The scenario is available as a pdf. If you would like to adjust it, you can download the scenario as a [Word File](#).

Credits / Scenarios:

Design and Development: Uppsala University

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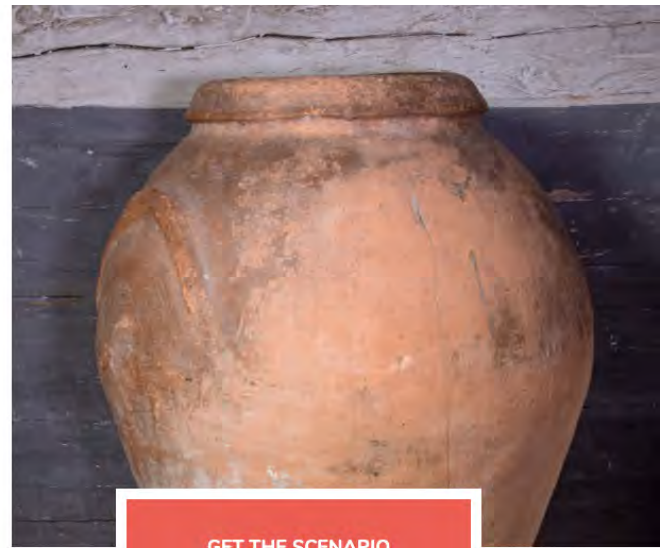


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Scenario: The Object

Follow a museum object

In this scenario, the participants trace an object from its creation, via the original cultural context, when it is collected, is put on display, and finally archived. The object plays the central role, and the participants play people that for one reason or another come in contact with the object.



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Credits / Scenarios:

Design and Development: Uppsala University

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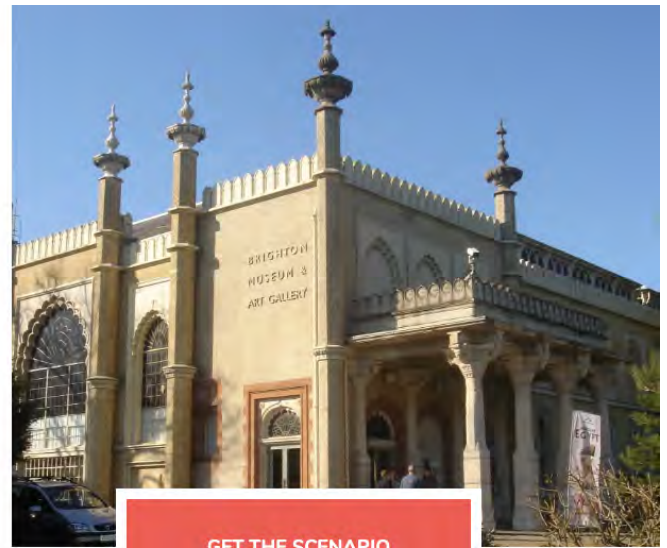


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Scenario: My Museum

Act as a visitor

A scenario where the participants act as the visitors of a museum. Through this scenario, the participants experience the different expectations and social background of different types of visitors and how this affects their interpersonal experience in the exhibition.



GET THE SCENARIO

The scenario is available as a pdf. If you would like to adjust it, you can download the scenario as a [Word File](#).

Credits / Scenarios:

Design and Development: Uppsala University

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Digital Tools

Looking for inspiration to create more personal experiences? Try our free and open-source tools that for instance let's visitors gift experiences, reflect in one minute and access digital content relevantly. The tools have been developed with and for museums to help them make hybrid experiences: Experiences that combine the physical and digital to create personal encounters with heritage.

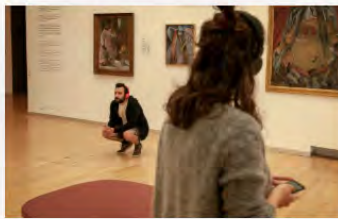


Web App

Gift

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[Learn More ...](#)

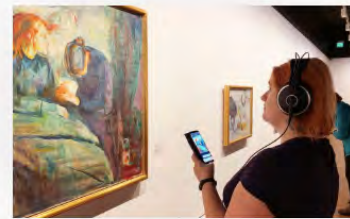


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Emotion Mapper

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Visual Markers

Artcodes

Artcodes lets you blend your physical exhibition with digital content – works like QR Codes, except you design the look yourself.

[Learn More ...](#)



Workflow

VRtefacts

VRtefacts puts visitors into a VR experience where they explore and touch 3D models of museum objects and share stories about them.

[Learn More ...](#)

Workflow

ScannerBox

ScannerBox is a workflow that enables you to generate interactive 3D models of objects in your collection or contributed by visitors.

[Learn More ...](#)

Workflow

Gift Viz

Gift Viz is a workflow that guides you to make insightful visualisations of data captured from gifting experiences.

[Learn More ...](#)

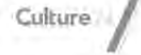


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European Union



BLAST THEORY

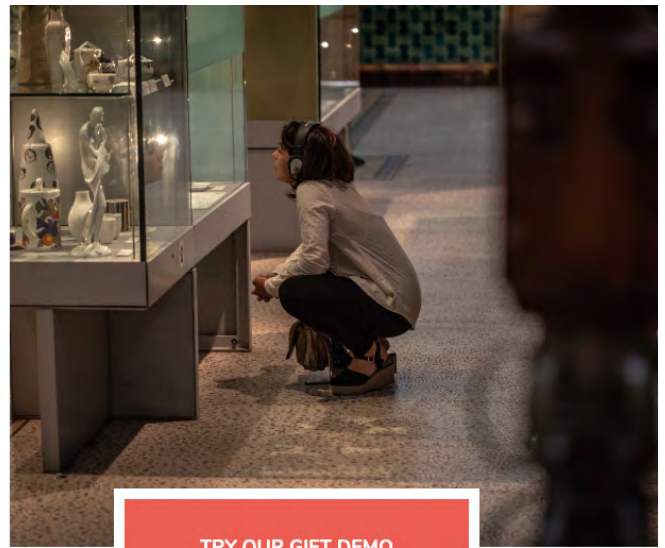




Gift

Give a museum experience to someone you love

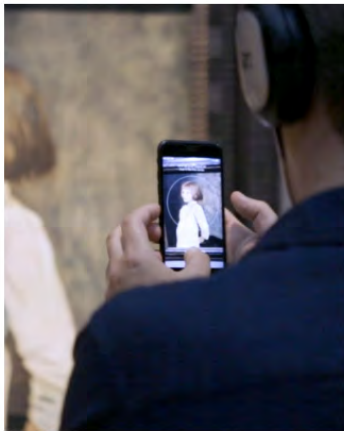
With Gift, you use your smartphone or tablet to create a digital gift. It's like a playlist or a mixtape, except with objects from a museum.



[TRY OUR GIFT DEMO](#)

Try out this demo version of Gift on your mobile phone

The Visitor Experience



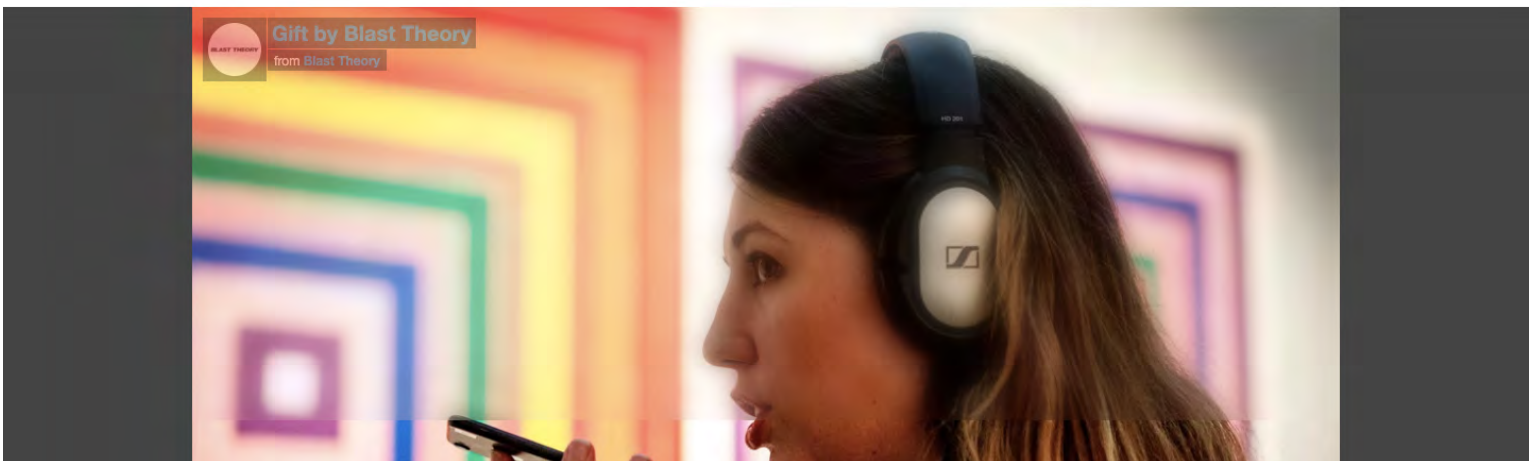
Open your browser and access the app. Think of a friend and choose objects from the museum.



Take photos of the objects and record messages. The app wraps it up and sends it to your friend.



Your friend receives the digital gift and you might get an answer or a gift in return.





What is the experience like?

Some people create playful treasure hunts with a game-like mission to find the objects, while others spend a great deal of time and care choosing a single object.

How to implement it?

Gift can be implemented quickly and is aimed at museums with tight budgets and limited staff time. Learn more in [this information pack](#) from Blast Theory.

Why Gift?

Compared to social media, Gift invites a more personal experience: Visitors explore the museum carefully, searching for objects that have meaning for them. The design is based on research on [gifting](#) and [intimacy](#).

Case Studies

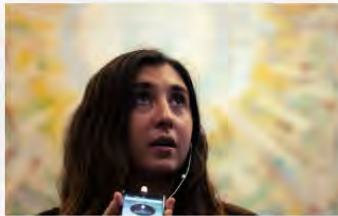


Creation of Gift

Brighton Museum

Blast Theory designed Gift in collaboration with Brighton Museum.

[Learn More ...](#)



An art version

The Munch Museum

Blast Theory designed an art version of Gift, focused on artworks by Edvard Munch.

[Learn More ...](#)



Testing Gift

UoN Museum of Archaeology

UoN Museum of Archaeology tested how visitors gifted experiences for each other.

[Learn More ...](#)

Insight

Have Blast Theory created the future of

“

Technologies can be effective ways of providing more content to visitors, but they often rub against the grain of the social experience, resulting in a low uptake. On the surface, Gift does much the same: the visitor uses their mobile phone to create and share content in a solitary way. But because it is so rooted in the practice of creating and sending gifts, it can enhance the social experience of the museum. A gift could be sent to a friend in another gallery, who is then encouraged to seek out the shared

museums?

asks Kevin Bacon, Digital Manager at Brighton Museum. [In this blogpost](#), he explains the museum's rationale for experimenting with the app:

exhibit. It can even be snared with someone outside of the museum, so that they can enjoy their gift at home, and possibly visit the museum themselves in the future.

“

The beauty of Gift is that it gives you a new pathway through the museum, one that takes you off the beaten track onto a pathway of your own.

– Digital Manager, Brighton Museum

“

I thought that's exactly what my mum would like, and so reading information about it made it feel more close to me or to my mum. So I connected my mum with this item and I think that helps remembering information better.

– Visitor, Brighton Museum

“

It definitely made me look at different things I've never seen in here before, and I've been in here loads of times.

– Visitor, Brighton Museum

No download. No app store. No login.

Gift is designed to be as seamless as possible: once visitors navigate to the website name of your choice (like [demo.thegift.app](#)), they can start exploring and creating gifts straight away.

Can the tool be customised?

The app in its most basic version can be built upon and customised by [accessing the code repository](#). Alternatively, Blast Theory can provide two levels of service to customise the app for your institution. They provide a full explanation in [this information pack](#).

How will the tool be supported?

We are committed to maintaining this tool and providing it for free until the end of 2021. You may also install the service on your own servers. Blast Theory will also provide support until at least the end of 2021 for anyone who chooses one of their paid options. Learn more about the experience and how to deploy it in your museum in [this information pack](#) from Blast Theory.

How do you get visitors to access the app?

As it is a web app they simply need to load a web address. [Here are some further suggestions](#).

TRY OUR GIFT DEMO

Credits / Gift:

Design and Development: Blast Theory in collaboration with University of Nottingham, IT University of Copenhagen and Brighton Museum.

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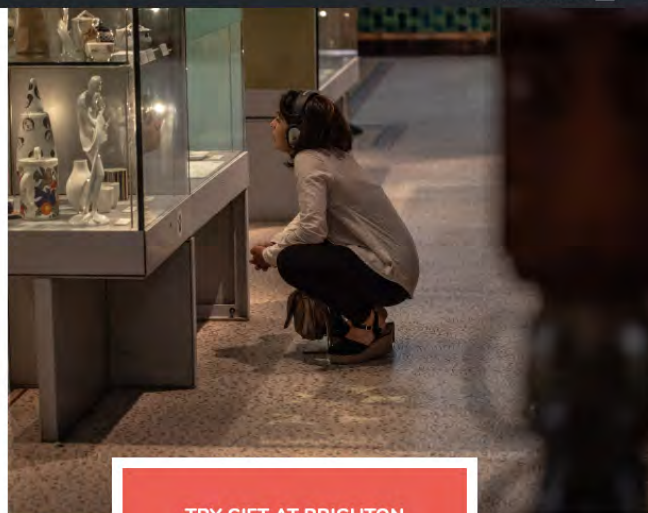


Case Study: Gift at Brighton Museum

Seeing the museum with new eyes

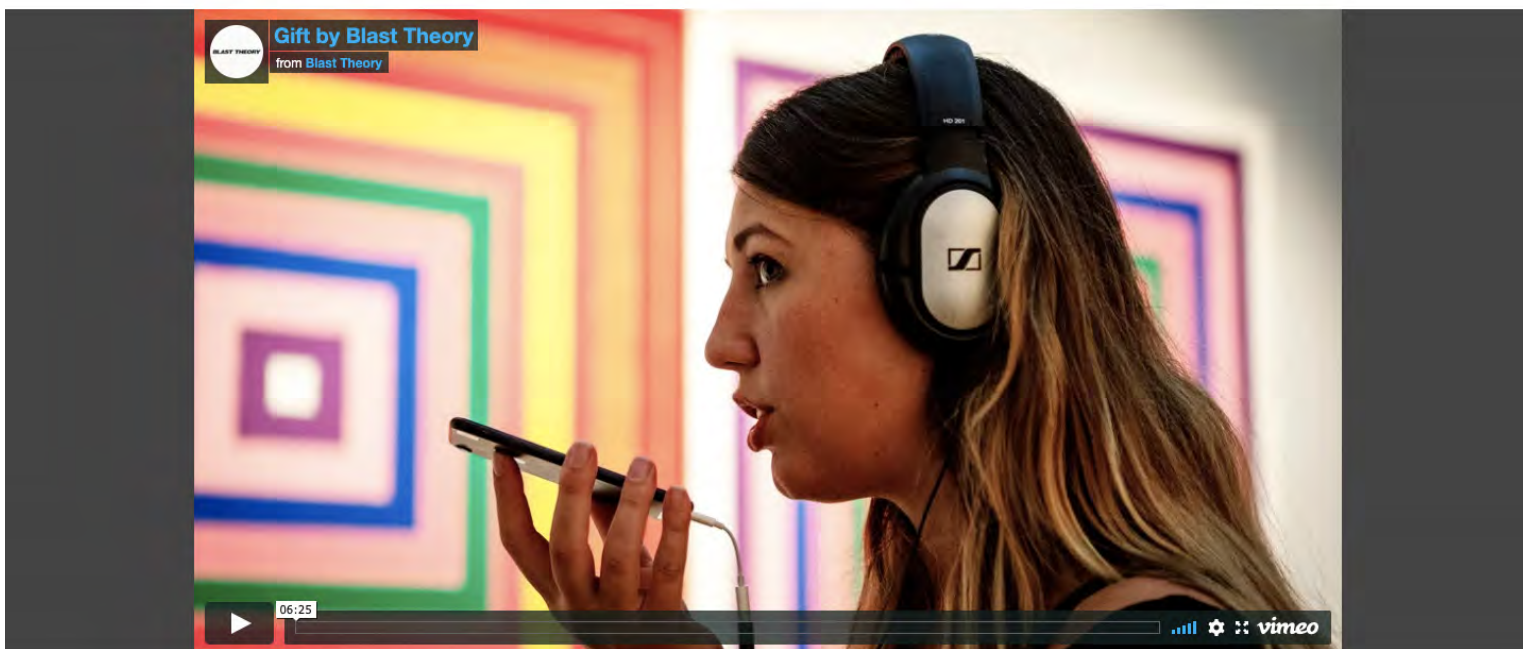
Over the last 3 years, Blast Theory has developed an app that invites a visitor to see the museum through the eyes of someone else – a person they want to create a digital gift for. Their partner institution for this development was **Brighton Museum**, a city museum housing a wide range of artefacts from the local environs and around the world.

Brighton Museum's curators wanted above all to build visitor engagement that did not detract from the objects on display. Therefore, Blast Theory's app centred on voice – visitors listened more than looked, and spoke directly into their phones. The very personal tone and style immediately set the expectation for a reflective, thoughtful visit, and visitors could take as much time as they liked.



TRY GIFT AT BRIGHTON

Try the version developed for Brighton Museum.



The app first offered visitors a gift of their own to open, created by museum staff. The gift gave visitors a context for what would be expected of them and what a gift could offer.

Once a visitor chose to make a gift, the app asked them to mentally select the person they would make their gift for before exploring the museum. It then asked them to select an object they thought would be particularly interesting to their receiver, take a picture from their own perspective, and record a personal message in their own voice. Visitors could include up to three objects in one gift,

which they sent using one of several popular online sending and sharing services. In the spirit of a personal gift, though, the gift went only to its receiver, not to a social media platform.

“

It was a great opportunity to watch live prototyping and testing in action on a scale that we couldn't do in-house. That experimental approach has influenced how we approach future digital interpretation projects.

- Digital Manager, Brighton Museum

“

One of the most important design intentions was to address the needs of museums who are attempting to respond to the rise of mobile digital media, often with small budgets, very small teams, and lots of time pressure.

- Artist, Blast Theory

“

You're looking at the museum through fresh eyes.

- Visitor, Brighton Museum

The app was developed iteratively through a series of workshops and user tests at Brighton Museum from early 2017. In July 2018 Blast Theory organised a large public trial lasting three days, during which 170 visitors tried out the app. We gathered feedback through interviews and questionnaires, allowing us to conduct a thorough analysis of the user experience. The academic version of the analysis is published in [this research paper](#). The final version was publicly available from early June through late September 2019.



The most consistent reaction from visitors was that they felt the app offered them a new way of looking at museum objects or thinking about them. They saw the exhibition 'with other eyes', or 'through fresh eyes', looking with 'a different meaning'. One visitor explained that looking through another person's eyes 'made art seem alive'. Another noted multiple levels of engagement happening at once: 'You're actually looking for stuff that someone else would enjoy, but you're also looking at your own experience and what your eye is drawn to'.

When we asked visitors whether they formed personal connections to any of the objects, many responded confidently: 'If you can choose good objects, you will feel a personal connection to those objects as well'. One person said she 'really engaged' with objects she 'would have perhaps otherwise walked past'. Gift receivers felt particularly attached to the objects given to them and spent time

examining them, even when 'I don't think I would have necessarily looked twice at them'.

The act of using museum objects as digital gifts creates a triangle between giver, receiver and the object, in which the object becomes connected with the relationship between the giver and receiver. One of the receivers said that the process of finding an object 'brought back great memories and important things in our relationship'.



TRY GIFT AT BRIGHTON



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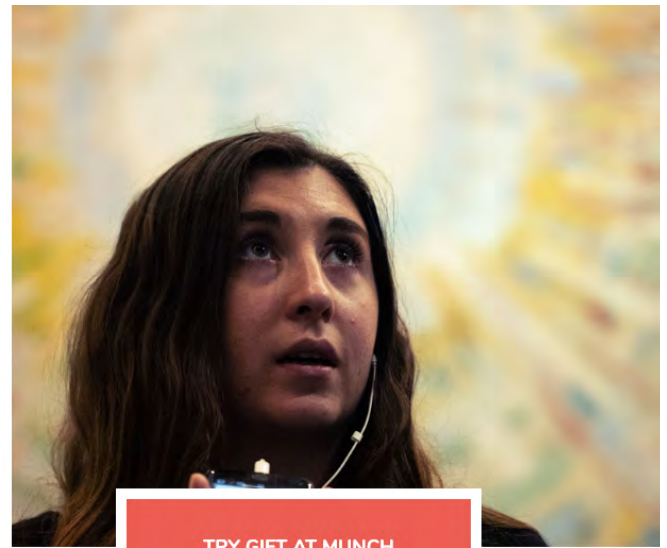
Culture24

Case Study: Gift at the Munch Museum

An art version of Gift

Gift was originally developed for **Brighton Museum**. In 2019, the designers behind Gift at **Blast Theory** set out to make a new version of the app for **the Munch Museum** in Oslo, Norway.

The Munch Museum posed a different opportunity for the design team at Blast Theory. The museum offers artworks by a single artist rather than the collection of artefacts at Brighton Museum. Therefore, some terms had to be changed, and playfulness was perhaps less appropriate for the painter of the famous '**Scream**'.



TRY GIFT AT MUNCH

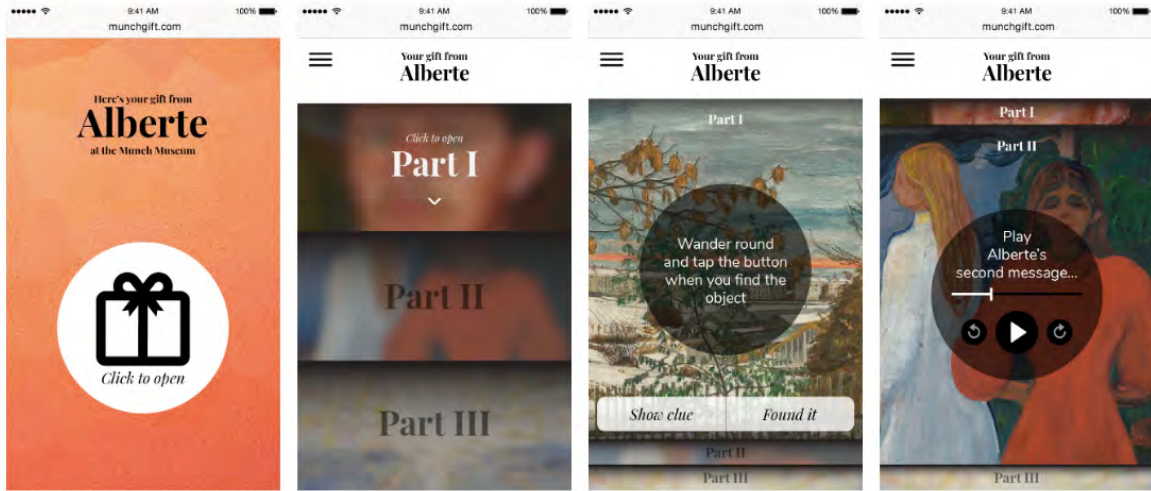
Try the version developed for the Munch Museum.



These and many other considerations led Blast Theory to radically alter and shorten the narrative within the app, although the functionality remained fundamentally the same as the final version released in 2019 at **Brighton Museum**.

The visitor experience begins with the option to open a gift from the museum. This gives visitors a context for what is expected of them and what a gift can offer. Visitors are then prompted to create a gift of their own to someone special. The app has had substantial uptake and positive responses.

The app is live at the Munch Museum from 28 September 2019 to April 2020.



TRY GIFT AT MUNCH



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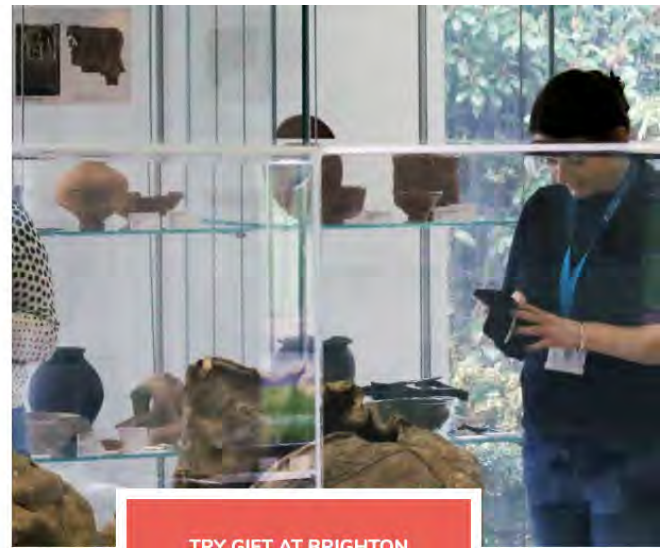
Case Study: Gift at UoN Museum of Archaeology

How visitors gifted experiences for each other

In 2018, we tested the Gift app at **University of Nottingham Museum of Archaeology**. Participants were encouraged to arrive as they would normally visit a museum – alone, with a partner or in a group – and were free to use the app on their own smartphone or borrow one. They were asked to explore the museum, then use the app to create a digital museum experience for another participant and unwrap any experiences that might be gifted to them.

We worked with museum staff to create "seed content" for the app: this allowed users to create experiences using either the seed content, content they created themselves, or a mix of both. In particular, the app asked users to create experiences that consisted of three museum exhibits: one as the starting point for the experience, one as the middle, and one as the end.

In practice, visitors were much more inclined to create museum experiences built entirely from their own images and words, rather than using the content supplied by the museum. However, some seed content was appreciated as it provided an example to show visitors what sort of images and text might be appropriate. While some visitors approached the app as a way of creating and receiving tours of the museum, most thought of it as a game or a challenge and were excited about having to explore the museum to track down the exhibits that were gifted to them. Unfortunately, some of these visitors were disappointed with how easy it was to find the exhibits in the compact museum, but were still positive about the potential for the app to encourage them to explore museums in ways they would not do otherwise.



TRY GIFT AT BRIGHTON

Try a version developed for Brighton Museum.

TRY GIFT AT BRIGHTON



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Gift // Tips for Encouraging Downloads

How do you get visitors to use the app? Here are some suggestions:

Provide Connectivity

Some visitors may not have access to 3G data. Providing Wi-Fi at your museum ensures that all visitors can use and access the app. Even better, you could even advertise the app on the Wi-Fi's connection screen that gets displayed to the user when they connect to the network for the first time.

Advertise the App

Research shows that museum staff are the most effective advocates for a digital project. Let them all try the experience and encouraging them to tell visitors about it. Mention the app in your marketing materials and make it visible as visitors enter the museum. Ensure that you clearly state the web address for the webapp and if possible, details on how to connect to the museum's Wi-Fi.

Provide a gift from the Museum

You can create a gift by a member of museum staff that each visitor will receive as they open the webapp. This welcomes them, helps to learn how the app works and provides a great opportunity to highlight key objects in your collection.



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Gifting and Exchange

The valuable connection between giver and receiver

Researchers first began to theorise about gifting in the 1920s. The earliest work, by Bronislaw Malinowski (1922) and Marcel Mauss (1925), studied the ways in which certain non-Western cultures interacted. They interpreted some of these interactions in terms of gifting and thus established concepts about gifting that have been extrapolated to cultures around the world and continue to dominate or influence thinking on the topic to this day. Probably the most important of these early ideas is reciprocity – the idea that although gifts are freely given, one cannot usually receive a gift without some social expectation to return the favour or remain in the giver's social 'debt'. For this reason among others, gifting is regularly understood as a key means of binding individuals into a social system. (One well-known but contested study suggests that debt-free gifting is possible between romantic partners.) The concept of gifting as it is most commonly understood – such as giving birthday or wedding presents – has over time been applied to a range of behaviours involving discretionary giving, such as tipping waitstaff or even bribing government officials. We use the terms 'relational' to refer to the more commonly understood type of gifting, which we use as the basis for gifting intimate experiences in museum settings. The other forms of gift-related behaviour (such as tipping or bribery) are referred to as 'transactional' and do not underlie this work.

In the past half-century or so, gifting has become a significant research topic, not only where it started in sociology and anthropology but in marketing and consumer research, where a great deal of very detailed work has been done around gift-givers' attitudes and selection processes (with less attention paid until recently to the gift receiver). Researchers have also paid attention to the negative aspects of gifting, primarily feelings of obligation and anxiety. In terms of digital gifting, two observations have dominated the discussion. First, the fact that giving a digital gift is relatively easy – in a few clicks you can have a voucher on its way, or a link to a song or video that you might not even have to pay for – is a major contribution to the fact that people tend to value digital gifts less than they do physical gifts. Second, discussions of 'gifting' sometimes mix with discussions of 'sharing', and it is not always clear exactly where one ends and the other begins. However, digital sharing seems to suffer from at least as much perceived lack of value as digital gifting. Our work on intimate gifting in museum contexts makes use of existing theories around transactional gifting, looks at the experience from both the giver's and the receiver's point of view, anticipates negative feelings of obligation and anxiety, and makes a point of creating a sense of personal value in the exchange of digital gifts.

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Transactional/relational: Davies, Gary, Susan Whelan, Anthony Foley & Margaret Walsh (2010). *Gifts and Gifting*. *International Journal of Management Reviews*, 12(4), pp. 413–434. DOI 10.1111/j.1468-2370.2009.00271.x

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Ease of digital gifting: (Kwon 2017, but to seem less self-serving) Leong, Tuck W. & Peter Wright (2013). *Revisiting social practices surrounding music*. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 951–960). DOI 10.1145/2470654.2466122

One on sharing: Belk, Russell (2007). *Why Not Share Rather Than Own? The ANNALS of the American Academy of Political and Social Science*, 611(1), pp. 126–140. DOI 10.1177/0002716206298483



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Intimate Experiences

Designing for intimate experiences for pairs or small groups

A lot of work has been done on how to increase visitor engagement with museums and cultural heritage sites. However, not much has been done to create intimate experiences – for pairs or small groups, who already know each other – that leverage and strengthen personal connections as well as engagement with the museum. Here we offer a few examples of what has already been learned.

Back in 2002, a prestigious research centre developed *Sotto Voce*, a simple audio-visual guidebook that allowed pairs of visitors listen in on information that the other had chosen to listen to. Some used this 'shared listening' to learn about their partner's interests as well as pursuing their own. This made them bond over what they perceived as a 'shared secret'. It also reduced conversations in the galleries themselves, reducing distraction for other visitors, but encouraged conversations after they left the exhibit. Other visitors used the guidebook to 'check in' on their partner, which helped them coordinate their visit without interrupting each other. A decade later, a project conducted at Speke Hall invited people with learning disabilities to take time responding to the site in their own ways. In the course of several workshops, they created interactive artefacts representing their experiences with Speke Hall. These objects were eventually showcased at the site. In this case, the positive intimate experiences took place outside the context of the regular exhibition, but their outputs enriched the experience for later visitors.

A series of recent investigations into personal interpretations of museum visits within small groups also used workshops to provide space and time for thoughtful encounters. These projects, led by researcher Lesley Fosh, used gifting as the mechanism for developing intimate experiences in a museum setting. Her workshops led pairs or small groups of friends through the process of photographing objects they felt their partner(s) would like to receive. They then annotated these objects with text and music. The partner(s) received their personalised gifts on a smartphone and used the gifts to guide their movements through the museum. Later stages of Fosh's work focused specifically on how this kind of technology can help small groups to navigate through the museum together comfortably, minimising the time and energy that many (often parents of young children) spend keeping track of faster, slower, or easily distracted members of their group. The intimate social element of all of these projects is arguably the most important. Also, the lack of attention to social elements can cause problems, as evidenced in the *MuseUs* project. *MuseUs* was an example of 'serious play' whose intention was for visitors to create their own personal narratives around an art exhibit. This smartphone app allowed visitors to select the artwork that they felt best matched an emotion, poem, or question posed to them on their smartphone

screen. Their responses generated an art-viewing profile based on MHKA scores (an established rating method in fine art). Others in the same group could view each others' choices and scores. The researchers intentionally avoided making the experience into a game-like competition, but they did not make any alternative use of the shared information, either. In the end, they noted that one of MuseUs's greatest weaknesses was the fact that it did not make more of its social element. Based on the small body of work on intimate experiences in a museum context, we believe that intimate experiences can develop engagement while avoiding two major pitfalls: isolating visitors in a bubble of technology, or turning the museum into a generic background for a game.

References

[Sotto Voce](#)

[Speke Hall](#)

[Papers by Lesley Fosh and colleagues](#)

[MuseUs](#)



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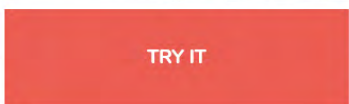
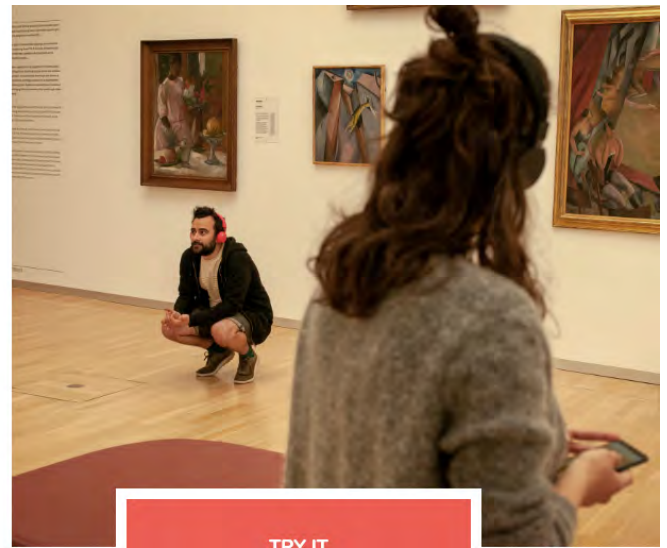
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Never Let Me Go

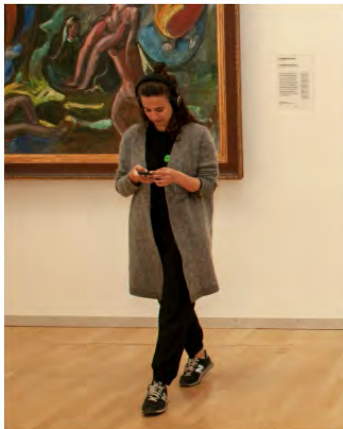
A play experience for art museums

With Never Let Me Go, two visitors guide each other's encounters with art. Through questions and prompts, the web app fosters deep introspection in a playful way.



Press the red button and follow the instructions to try out Never Let Me Go.

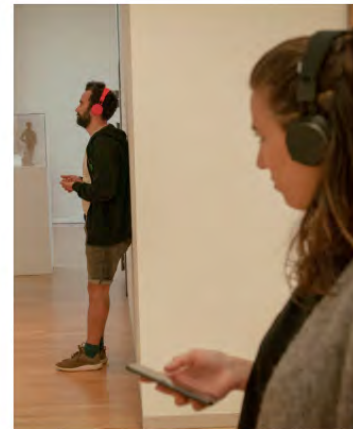
The Visitor Experience



The two visitors put on headphones and open the web app on their phones.



The guiding visitor, called the controller, selects among a range of commands.



The commands are played in the headphones of the other visitor, called the avatar.

What is the experience like?

The app allows two visitors to guide each other's behaviours and reflections, thereby letting them co-create their experience of art.

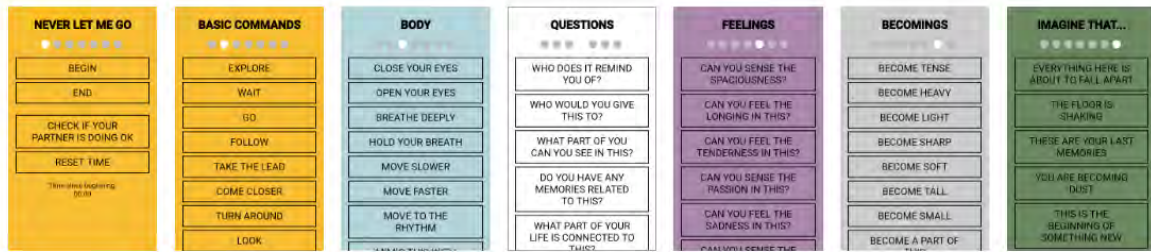
How to implement it?

Never Let Me Go is currently an experimental prototype. If you would like to implement it, please [contact us](#).

Why this app?

This is a different kind of audio guide: One that is social, yet introspective. Visitors experience the art space in a new way and connect to art works in a deeply personal and playful manner.

Screenshots from the app



“

You can't interact with the artwork. In this way, you interact with each other in the context of the artworks.

- Visitor, National Gallery of Denmark

“

It was a way of looking at the art and to stay with it longer than I would do otherwise.

- Visitor, National Gallery of Denmark

“

I was more aware of emotions, because I was prompted to be thinking about things I normally don't think about. So yeah, this museum visit was more emotional than my usual museum visits.

- Visitor, National Gallery of Denmark

TRY IT

Credits / Never Let Me Go:

Design and Development: Karin Ryding.

Photographer: Johan Peter Jønsson.

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Never Let Me Go // Instructions

Try Never Let Me Go

Never let me go in its current state is a **prototype** that has only really been tested on a few android phones. This means that there is no guarantee that it works on all phones. Just try and see if it works on your phone or not.

It's a two-player experience. To play it you need a **partner**. Both your phones need to be connected to the **Internet**, and you both need **headphones**. First, decide which role you want to try.

As the avatar you go to this address (or use the QR-code):

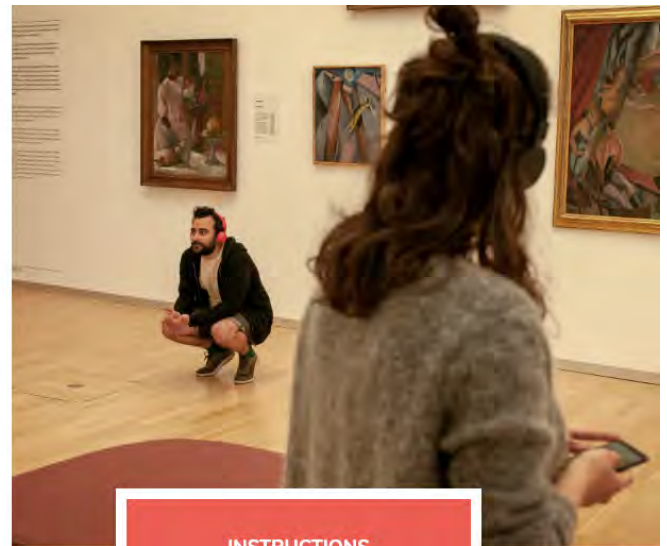
<https://modgift.itu.dk/neverletmego/avatar/>



You activate the Avatar-app by pressing the START-button. What this should do is to **keep the screen awake**. This is **necessary for the system to work**. The disadvantages of it is that if you put the phone in your pocket with the screen on, all kinds of thing can get triggered through touch. What we recommend is either holding the phone in your hand or installing a touch-block on it. We used a touch-block app during the testing so that players could put the phone away and not think about it.

As the controller you go to this address (or use the QR-code):

<https://modgift.itu.dk/neverletmego/controller/start.php>



INSTRUCTIONS

[Download the instructions as a PDF.](#)



Here you can register a controller (use a name that you can remember) that you can reuse whenever you want. Next step is to **get the code from the avatar app** so the two get connected. The controller will hear the same as the avatar is hearing. The only exception is when you press the BEGIN-button. This will trigger a short introduction that are different depending on which role you're playing. You scroll to the side to find the different categories of prompts, and up and down to see all the available options. Start the experience with BEGIN and end with END.

Never let me go is designed to be used in art museums or galleries **with someone you know well**. So that is what we recommend, but of course it could be interesting to try it in other settings too.

Credits / Never Let Me Go:

Design and Development: Karin Ryding.

Photographer: Johan Peter Jönsson.

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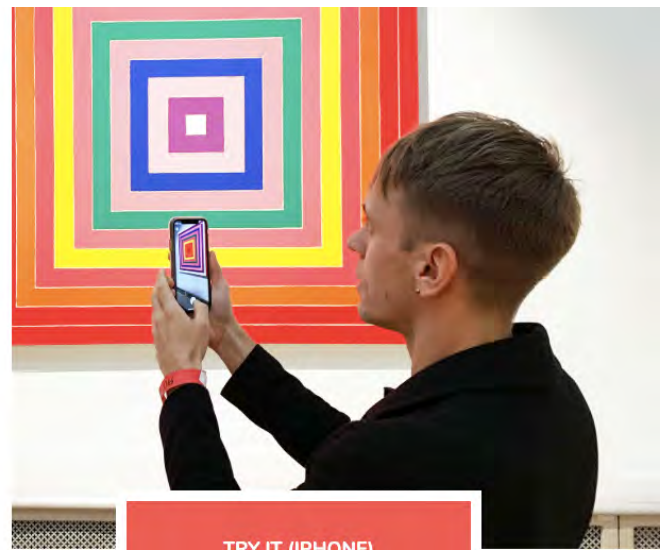
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Culture /

One Minute

Reflect in one minute

One Minute uses image recognition to identify artworks and offer visitors short, bite-size reflections about them.



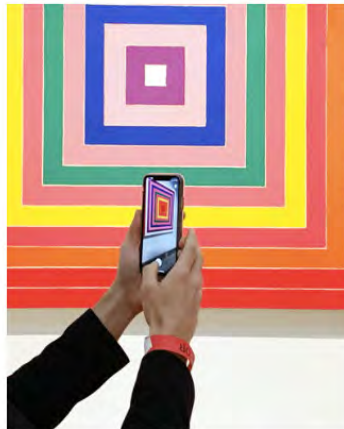
[TRY IT \(IPHONE\)](#)

Download the app for [iOS](#) or [Android](#). To try it, scan one of the artworks on this webpage.

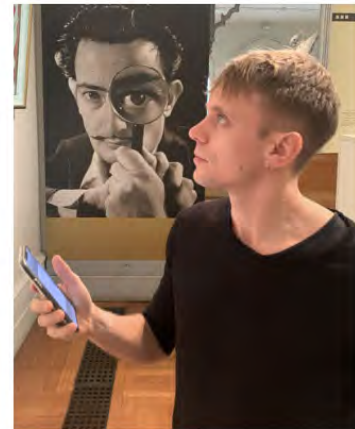
The Visitor Experience



Download the app for [IOS](#) or [Android](#) and find an artwork that interests you.



Use the app to scan the artwork.



Read a short story that encourages you to look at the details of the artwork.

What is the experience like?

Visitors use the app to scan an artwork. The app displays a story about the artwork, divided in chunks so visitors direct their attention to the artwork. You may guide the visitors by indicating which artworks are scannable.

How to implement it?

The heart of the system is the story editor. The editor helps you make stories that direct visitors to reflect on details within the artwork. You can use the story editor as it is, or you can **customise it**.

Why this app?

Tests show that the app is a companion rather than a distraction: The app provides a format for simple, yet personal reflections that encourages visitors to direct their attention to specific details in the artwork.





“

I usually skip reading the labels because it takes away my focus from the artwork. With this, I actually use the story while I'm focusing on the artwork. It's really cool.

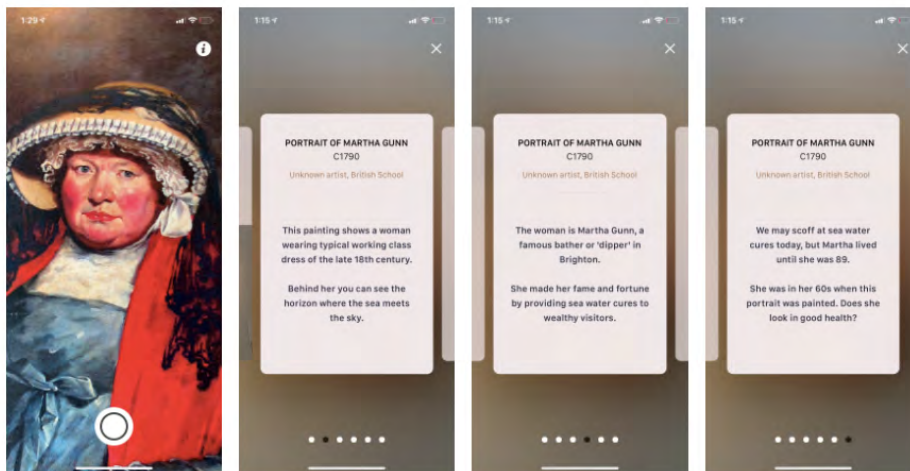
- Visitor, The National Gallery of Denmark

“

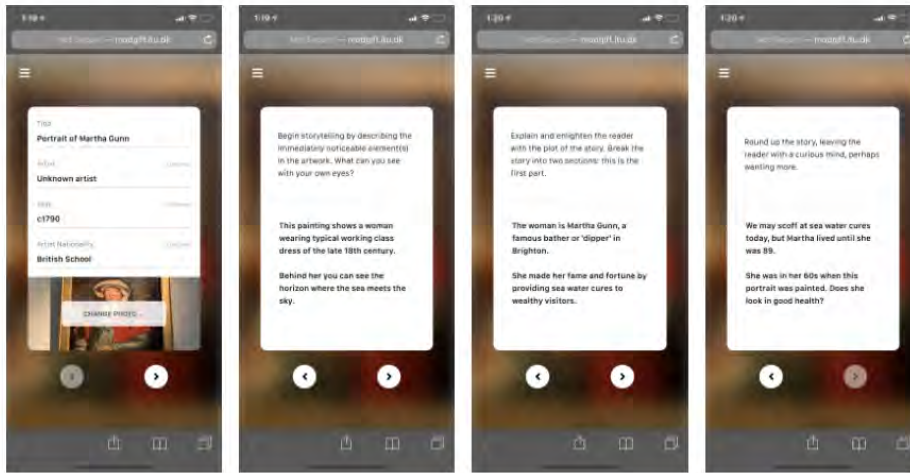
I liked how the story wasn't served in "one big plate". For every bit I felt like "ahh that's exciting", and then I read the next one, "ahh that's exciting". It's like a mystery being solved.

- Visitor, The National Gallery of Denmark

Screenshots from the app



Screenshots from the story editor



How to use?



Create an account and log into the story editor.



Use the story editor to create stories.



Visitors access the app, scan artworks and read your stories.

What are the technical requirements?

The experience is developed for both **iOS** and **Android** devices. The institution will need to provide stable wi-fi to enable the scanning of artworks. **The story editor** is a web url that works on both desktop and mobile devices.

Can the tool be customised?

The app can be built upon and customised by accessing the code repository. At GitHub, you can get the **source code for the app** and the **source code for the story editor**.

How will the tool be supported?

We are committed to maintaining this tool until the end of 2021. It will always be free. You may also install the service on your own servers.

TRY IT

Credits / One Minute:

Design: Linda Stoltze, Tim Wray, Anders Sundnes Levlie

Development: Phillip Nilsson, Marek Kisiel, Philip Korsholm, Tim Wray, Mace Ojala

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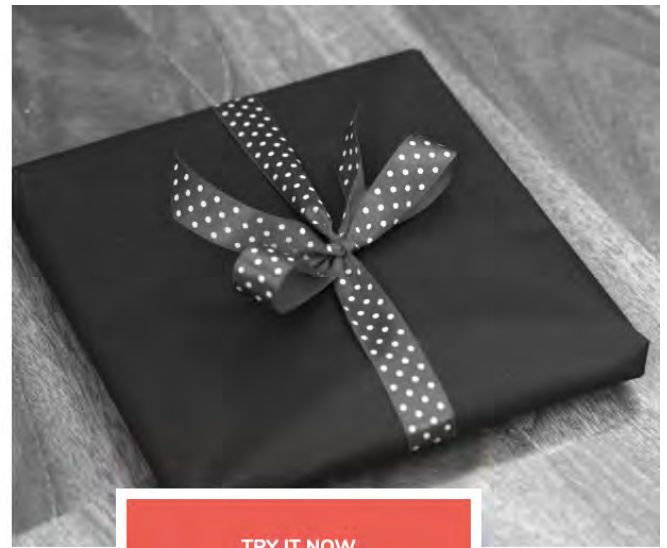
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Gift Wrapper

Wrap a museum gift with digital content

With the Gift Wrapper app, visitors can make a museum gift more personal by adding a link to digital content such as music, photos or videos.

[TRY IT NOW](#)

The app (called Hybrid Gifting) is available for [IOS](#) and [Android](#).

The Visitor Experience



Find a gift with a visual marker and download the app for [IOS](#) or [Android](#) (called Hybrid Gifting).



Scan the visual marker on the gift and add digital content such as music, photos or videos.



Give the gift. The receiver scans the visual marker and gets the digital content you've added.

What is the experience like?

With the GIFT Wrapper app, visitors can create or select any digital content and link it to items you sell in your gift shop. The app makes linking digital to physical a quick and easy process.

How to implement it?

You decide which gift items to sell with a link. The app helps you create the link that visitors then use to add their content. You can use either [QR Codes](#), [NFC tags](#) (microchips) or [Artcodes](#) (self-made visual markers).

Why this app?

Visitors engage with your museum in a personal and creative way while making a gift for someone they care about. It also has the potential to increase sales and visits to your museum. The design is based on research on [gifting](#) and [intimacy](#).

Case Study

Greeting Cards with digital content

Learn how Gift Wrapper was used at two workshops to add digital content to greeting cards.

[Learn more ...](#)



How to use?



Decide which gifts to sell with a link.



Generate and add QR codes, NFC tags and/or Artcodes.



Promote the gifts and the Gift Wrapper app.

What are the technical requirements?

The institution will need to provide stable wi-fi, or at least 3G or 4G coverage, for visitors to create their gifts on location. However, they can add digital content at any time and in any location.

Can the tool be customised?

Each code or tag can be customised to include content that you select or create. A customised version of the app allows you to offer your museum's own digital

content in addition to the content made or chosen by your visitors. Contact us via artcodes.co.uk/hg to discuss options (contact options coming soon). You can also [get the source code](#).

How will the tool be supported?

We are proud that GIFT project partner University of Nottingham, along with Loughborough University and industry partners, has received funding for a significant follow-on project based on Gift Wrapper. Therefore, we intend to extend and support the app during 2020 and 2021, with the strong possibility of further support after that point. You can follow this work via the [Mixed Reality Lab's project page](#) (*Hybrid Gifting* project details available early 2020).

TRY GIFT WRAPPER

Credits / Gift Wrapper:

Design and Development: University of Nottingham.

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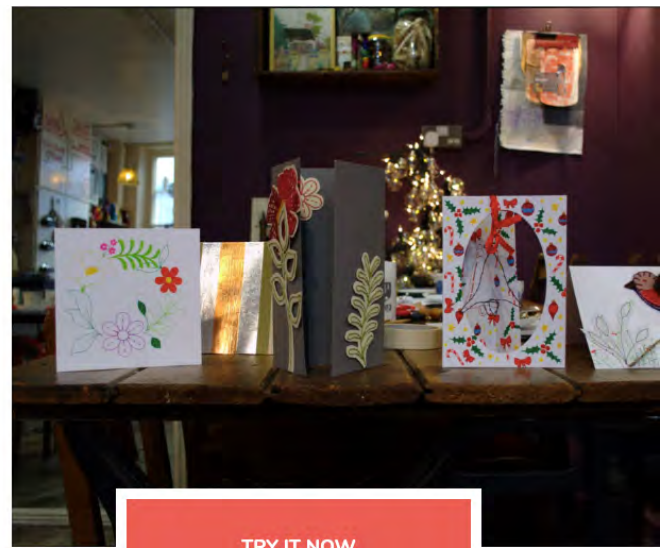
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Case Study: Gift Wrapper and Debbie Bryan

Greeting cards with digital content

Gift Wrapper was used on 2 November 2018 at a workshop with **Debbie Bryan**, an independent creative retailer and 'haven of gift giving' in Nottingham, UK. The workshop was geared towards making greeting cards and/or wedding favours. Its 11 participants were shown how to use and/or create QR codes, NFC tags, and Artcodes, then used the Gift Wrapper app to link the digital content of their choice to their cards.



TRY IT NOW

The app is available for Android devices from the Google Play Store. The Apple iOS version is under development.



This workshop and one themed around holiday cards on 7 December 2018 involving 17 participants at the Mixed Reality Lab at the University of Nottingham revealed some interesting facts about the relationship between physical and digital layers in a single gift. The digital layer tended to be more highly personalised, using photos, songs, even secret messages. It was more interactive, turning some physical cards into games and jokes. Physical cards with digital layers tended to be seen as keepsakes more often than plain physical cards were, and participants tended to reuse the digital layer in a way that is difficult or impossible for physical objects.

Based on this work, the university and its collaborating institutions received significant funding to advance the Gift Wrapper app and explore the idea of *Hybrid Gifting* more fully. You can follow this work via the [Mixed Reality Lab's project page](#) (*Hybrid Gifting* project details available early 2020).



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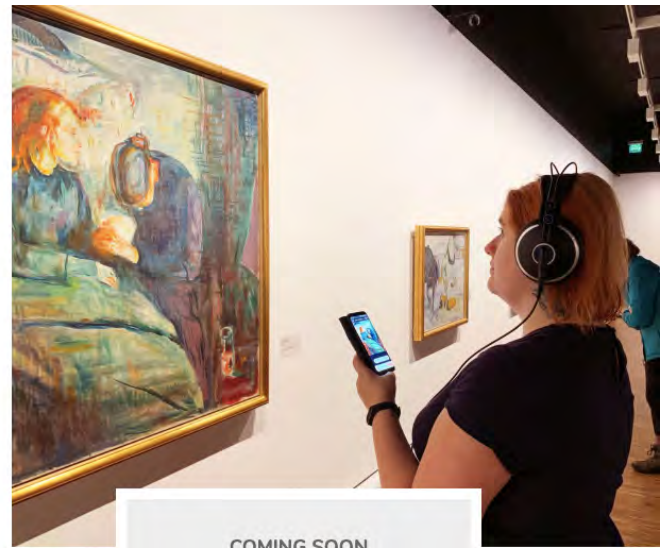
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Emotion Mapper

Explore visitors' emotions

With Emotion Mapper, you can gather input about visitors' emotions and visualise their responses.



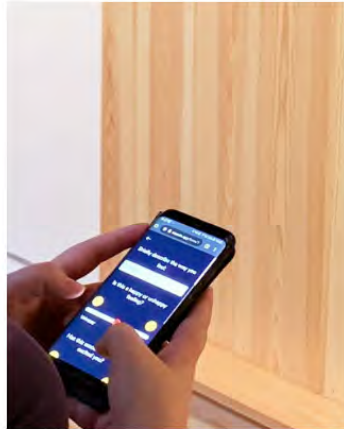
COMING SOON

Emotion Mapper is due to become available late December 2019.

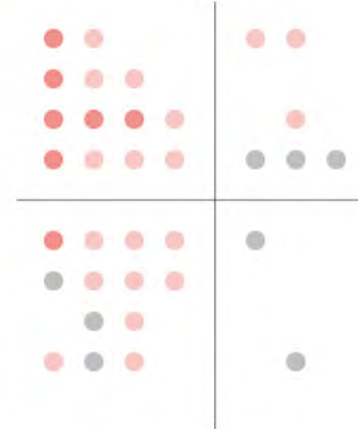
The Visitor Experience



Access the Emotion Mapper app and let it guide you to exhibits with emotions you're interested in.



Type in what you feel and rate the intensity.



When you've viewed all exhibits you receive a visualisation of your emotional responses.

What is the experience like?

Visitors look at selected exhibits and answer questions about their emotional experience. The answers are compiled into visualisations that show how visitors react emotionally.

How to implement it?

With the Admin interface, you create questions for exhibits you select. The interface is connected to a data server, which stores all data generated by users.

Why this app?

Emotion Mapper provides a way for visitors to reflect on their emotions when they visit your museum. It also gives you insight into what they feel when they stand in front of an exhibit, and what they are interested in emotionally.

Case Study

Emotional responses to Munch's artworks

Learn how the design company Next Game used Emotion Mapper to facilitate emotional encounters with Munch's art.

[Learn more ...](#)



“

I thought the whole thing was great, like the personal experience of Munch and these surroundings and also connecting that to your own experience, to try to connect it to your own emotions. It was really nice.

- Visitor, The Munch Museum

“

As much as I kind of love and hate this kind of technology that reads people, I think it is also interesting for people to have a chance to connect with themselves.

- Museum Advisor, The Munch Museum

How to use?



Download the desired package, which will be available by the end of 2019.



Follow the instructions to use the default web browser or make a fully customised version.



Encourage visitors to use the experience you've created.

What are the technical requirements?

Make sure your institution has reliable wi-fi or at least stable 3G or 4G service wherever your selected exhibits are located.

In order to use the tool to its full potential, your museum will have to have a server to store the data that is gathered, along with hosting the default web app if you choose to use it. Storage requirements will depend on uptake.

Please note that the Admin component will be Windows-compatible; organisations not using Windows will need to follow their system's best practice for accessing Windows software. The User component will be available for most smartphones.

Can the tool be customised?

Emotion Mapper is built for museums to customise which exhibits they want to ask about and which emotions they want to relate to each one. These can be changed at any time. Emotion Mapper could also be used to ask different types of questions, including factual ones. The Emotion Mapper tool provides a stable interface, making this as easy to customise as it is to use.

How will the tool be supported?

As Emotion Mapper comes with an Open Source License, your museums will be able to download and change your own version of the tool to whatever degree you wish. The basic version of the tool should be maintained at least through 2020 to ensure any major bugs are fixed within a reasonable time frame.

Credits / Emotion Mapper:

Design and Development: University of Nottingham.

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Case Study: Emotion Mapper at the Munch Museum

Emotional responses to Munch's artworks

You are standing in front of Edvard Munch's painting "Vampire". In your headphones, a female and a male voice are having a dialogue.

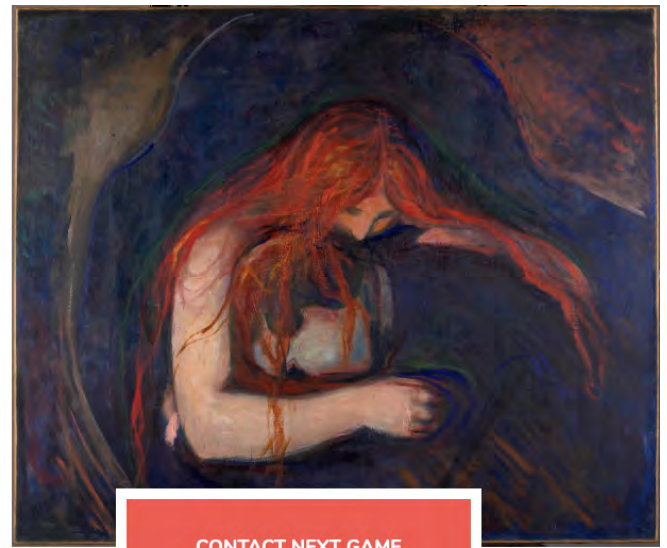
“

Woman: "Look at my arms, hugging this man. It is love!"

Man: "It's pain. Look at my neck!"

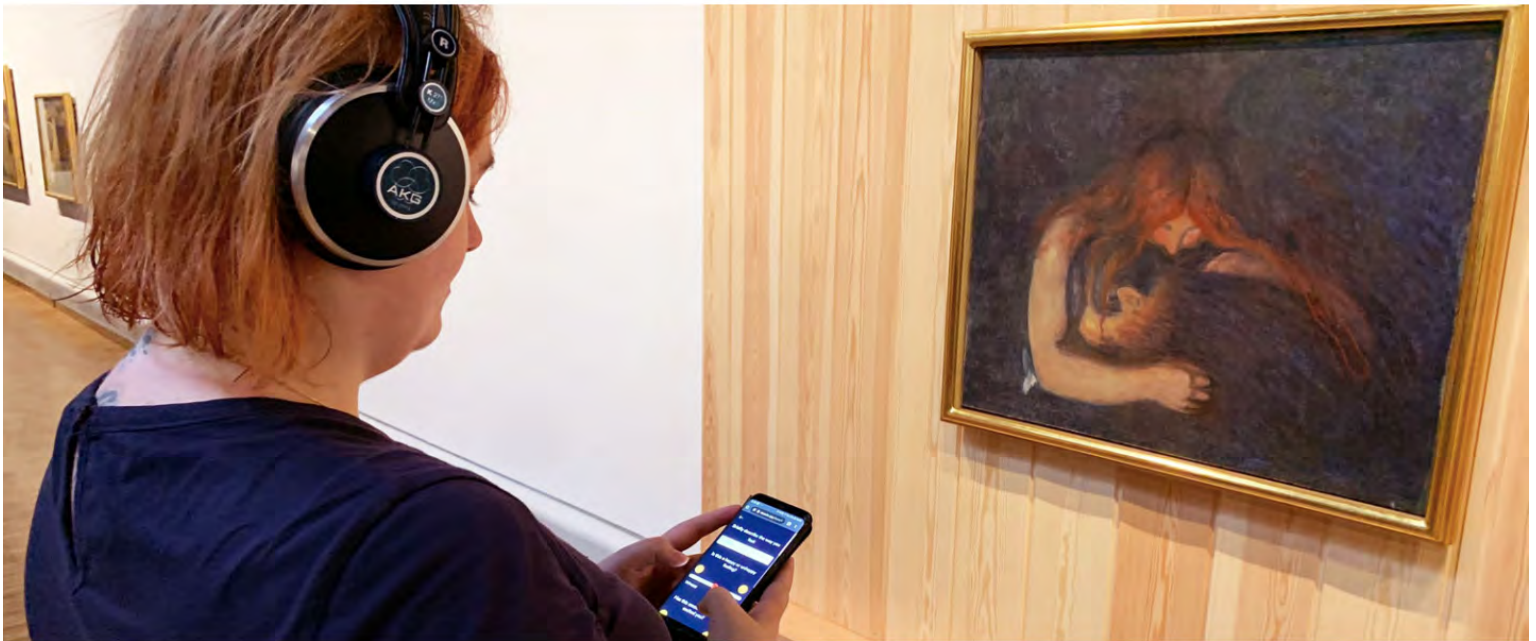
Woman: "He can hide in my hair. I will kiss him, and all his troubles will be gone."

Man: "That's not hair. It's blood! And not a kiss – but a bite."



CONTACT NEXT GAME

Contact Next Game to learn more about the Sensitive Pictures experience.



This dialogue is part of the *Sensitive Pictures* experience, which was created by the design company **Next Game** and presented to visitors at **the Munch Museum** in Oslo in August 2019. The experience allowed us to collect responses about emotions in different ways, in order to explore how we best capture visitors' emotions in encounters with artworks.

The experience used the Emotion Mapper software as part of a web app (created by **NextGame**) that gave visitors an emotional encounter with Munch's highly expressive paintings. The app showed visitors a list of six different emotions, each linked to one painting selected by curators at the Munch Museum. When the visitor selected an emotion – for instance, "Love" – the app

would guide them to the corresponding painting, in this case, "Vampire". There, the visitor could listen to an audio recording with a dramatic voiceover giving an emotionally charged interpretation of the painting.

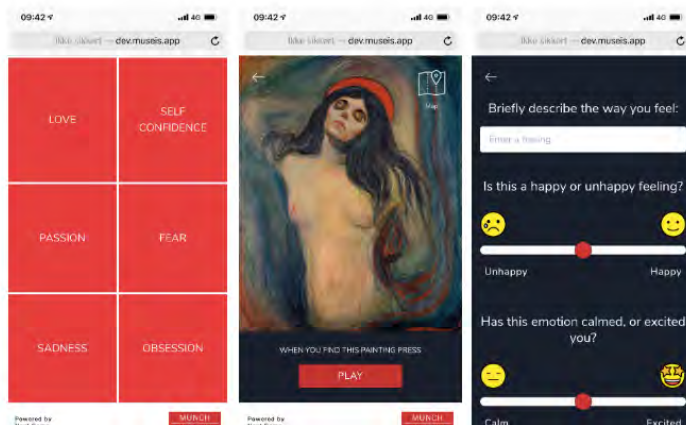
Afterwards, the app would ask visitors to think of something in their own life, related to the painting: "Now think about the most intense relationship you have been in. Describe how you feel about it." Visitors were then invited to type how they felt, using their own words. They were also asked to describe their emotion using a tool from psychological research called the "self-assessment manikin", in which they would use three sliders to rate the quality of their emotion. After this, the visitors could explore the other paintings and emotions presented in the app. There were six emotions in total.



Telephone conversation with Edvard Munch.

As the last step of the Sensitive Pictures experience, visitors were invited to "have a phone conversation with Edvard Munch". The artist was presented via his self-portrait which was displayed on a television screen placed on an easel. The artist communicated with visitors via an old-fashioned phone placed on a table in front of the screen, asking them to describe their emotions in relation to one of the paintings they had encountered. The visitors' responses were captured by a webcam connected to an emotion detection algorithm, which returned an assessment of their emotions (no actual images of faces were ever taken).

At the end of this playful encounter, visitors got a postcard showing the painting that they had the strongest emotional reaction to. On the back of the postcard was printed a visualisation of their emotional responses, paired with the results of their automated emotion recognition data.



Sensitive Pictures was trialled over four days in August 2019 with 132 visitors. On average, visitors spent 46 minutes using the app to view and respond to five paintings. They visited the Vampire painting more often than the others by a margin of between 1-18%, but the first emotion they selected – which corresponded to the Vampire – they chose an overwhelming 87% of the time!

Emotional data are highly personal. In the *Sensitive Pictures* trial, visitors were not only asked for their consent at the start of the experience, but were also asked at the end whether or not they would 'donate' their data to be used in research. Visitors who did not consent had their data deleted.



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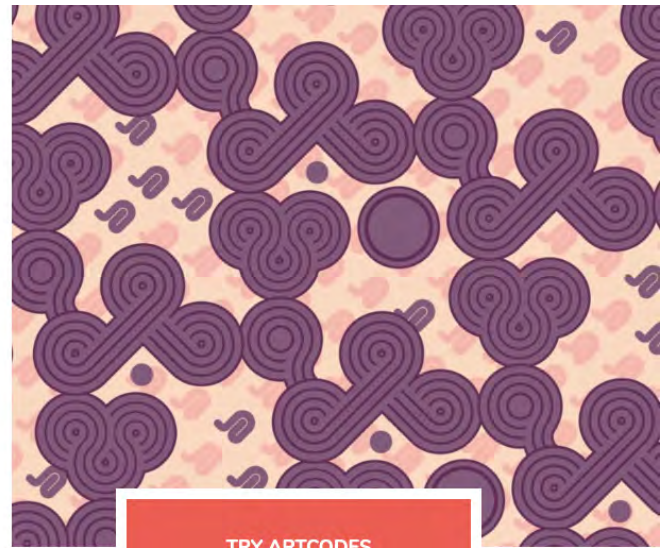
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Culture /

Artcodes

Access digital content in a relevant way

Artcodes are scannable markers that lets you blend your physical exhibition with digital content – works like QR Codes, except you design the look yourself.



[TRY ARTCODES](#)

Learn how to use Artcodes and test how they work within your museum.

The Visitor Experience



Download a customised app or the Artcodes App for [iOS](#) or [Android](#).



Find an Artcode and scan it through the app.



Engage with digital content, such as text, audio or video, which has been added by the museum.

What is the experience like?

Like QR codes, Artcodes are visual markers. You simply scan the marker and get access to digital content.

How to implement it?

Artcodes can be used with minimal technical resources. You only need a smartphone to both create and experience Artcodes. It can be easily adapted for any exhibition or purpose.

Why use Artcodes?

You design Artcodes yourself and decide exactly how they look. Thereby, you can create relevant visual markers that tell a story or match the aesthetics of your exhibition.





Case Studies



Playful Reflection

Museum of Yugoslavia

Museum of Yugoslavia used Artcodes to enable visitors to reflect on the past in a playful way.

[Learn More ...](#)



Storytelling

Nenescape Landscape

The Nenescape Landscape Partnership used Artcodes to create an interactive art trail.

[Learn More ...](#)



Participation

Tate Modern

Tate Modern used Artcodes to let visitors clock in and participate in a clay production line.

[Learn More ...](#)

How to use?



Get the Artcodes app for [iOS](#) or [Android](#).



[Learn how to draw Artcodes.](#)



Use the app to attach digital content, such as audio, video and links.

TRY ARTCODES

Credits / Artcodes:

Design and Development: University of Nottingham.

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Case Study: Artcodes at Museum of Yugoslavia

A playful way to reflect on the past

During two days in the Spring of 2017, **Artcodes** was used to offer visitors an alternative museum experience, inviting them to a form of “critical play” within the museum’s premises. The objective was to make a poetic and playful experience, which could lead visitors to engage critically with the violent history of the former republic. It was called *Monuments for a Departed Future* (or *Monuments* for short). The experience focused on the abstract anti-fascist WWII monuments built between 1960 and 1990 – internationally known as the ‘**Spomeniks**’.



Learn how to use Artcodes and test how they work within your museum.



Photo credit: Terekhova, <https://www.flickr.com/photos/terekhova/26007400862>

During the socialist era, they were popular sites of tourism, as well as school excursions. This shifted radically during the 1990s when the turn to nationalism brought a change in the perception of the monuments, which were now seen as symbols of a conflicting and ideologically undesired past. This often led to their destruction or abandonment. Because of their conflicted history, the monuments offer rich possibilities for interpretations and discussion.





Historic map from 1978 of the Yugoslav Spomenik sites

While the Museum of Yugoslavia hosted a touring exhibition about the Spomeniks in 2016, they are not represented in the permanent exhibition at the museum. We used Artcodes to give them a physical presence in the museum. They could be scanned with a smartphone, triggering a digital interaction inside the Monuments app.



Tjentište Memorial Monument and its Artcode

The Artcodes were placed so they were not always easy to spot, and sometimes even hidden intentionally. The Monuments app provided clues on how to find each marker. The purpose was both to introduce a playful activity of searching for the markers inside the museum space, and to let the placement of the markers reflect that many of the monuments are in remote locations, and hidden from public consciousness. Each Artcode served as an entry point to one of the existing monuments as well as to a specific theme. These themes were:

1. Monuments and meaning
2. Style and ideology
3. War, death and victims
4. Controversy and contested heritage
5. Tourism and play
6. Abandonment and destruction
7. History and the generational gap
8. The future



Artcodes used in the Museum

In the app, we presented the users with a series of poetic provocations. Our goal with these parts of the design was to invite a playful mindset which could trigger visitors' imagination, build attentiveness, evoke emotions as well as facilitate reflection. The provocations were presented as playful challenges. They

facilitate reflection. The provocations were presented as playful challenges. They would prompt participants to put themselves in a specific state of mind, using their imagination and their bodies to interact with the museum environment. These challenges ranged from being light-hearted, to more emotionally challenging.

Stand in front of the grave or close to it. Imagine a monument growing up in front of you. Look at it as it reaches the ceiling. What does it look like? What does it feel to touch? Admire its magnificence.

[\[Go back\]](#)

A moment of reflection

Furthermore, for each theme the participants were presented with a question which they could answer inside the app. The purpose was to provoke reflections on the different topics addressed, and to link the experience at the museum with personal life outside of it. After submitting an answer, it was possible to view answers from other participants.



Users reflecting on the content.

The visitors who tested the Monuments app inside the museum viewed it as a very personal experience. They interpreted the challenges and questions as a way to make a personal and emotional connection with the historical content. One visitor described the experience as a "historical/emotional roller-coaster". In this way, the experience became 'bigger'– not just about learning history, but to some degree also about connecting with challenging aspects of life such as death, conflict and forgiveness. Play and imagination were also seen as ways to "communicate with the space" and putting the participant in an "active role", as well as challenging them to think for themselves. They saw the questions in the app as ways to reflect and contribute, but also as concrete reminders that people have very diverse perspectives on things.



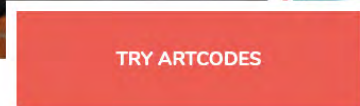
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Case Study: The Nenescape Landscape Partnership Scheme

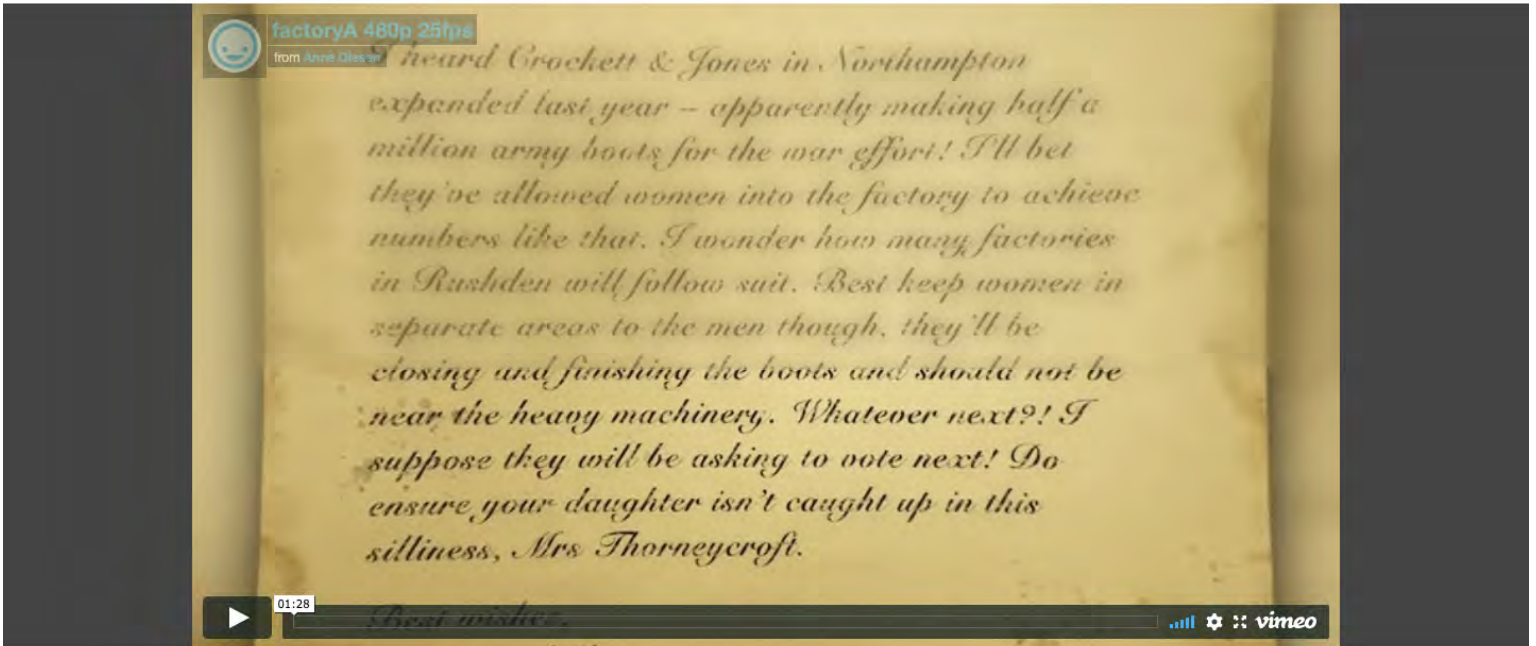
An interactive art trail

The GIFT Project partner **University of Nottingham** was approached by **the Nenescape Landscape Partnership Scheme**, a UK Heritage Lottery Funded project that is working to regenerate a section of the River Nene. To promote awareness of local history and heritage, we worked with project partners and local artist Michelle Barnett to develop an app called *All Aboard for Rushden*.

Barnett's artworks, produced as rugged, metal signs, were placed along an interactive art trail. The artworks are actually Artcodes that visitors can scan to unlock the hidden histories of the area and its people. The storytelling is based on a true local news story from 1911 in which a mail bag was hit by a train on a train line not far from the art trail. The mail in that bag was eventually recovered. Visitors are asked to help find the letters. Scanning each artwork reveals a different hidden piece of local history that may otherwise have been forgotten.



Interpretation & Community Engagement Officer Alison Brand-Barker shows the Artcodes sign and letter.

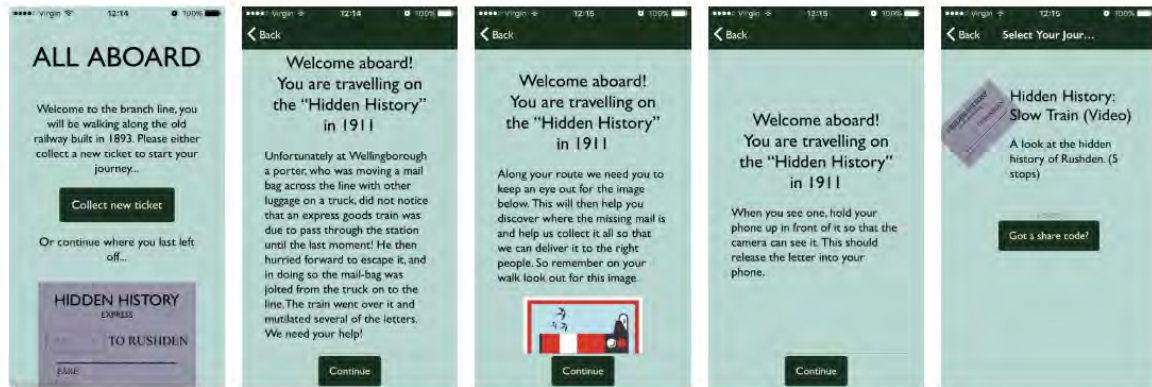


An extra benefit of Artcodes is that partners can create new content of any kind as often as they like, even soliciting stories from local residents or visitors. They can create themes or games based on local events or times of year, as when visitors who completed the interactive trail during its inaugural festival were eligible for a prize. They can also move the physical artworks or make more to extend the route, including new digital content.

An initial version of the app was tested with project stakeholders using

...initial version of the app that tested their project commissioning prototypes of the artwork on 6 September 2018 in the Rushden Transport Museum. Following their feedback, the app was further refined and new content was added. The app was released for both Android and iOS devices as of 28 August 2019. It was publicly launched as part of the Nene Valley Festival from 14-22 September 2019 and has been heralded by project partners as a successful element of their festival.

The app is available for **iPhone** and **Android** devices.



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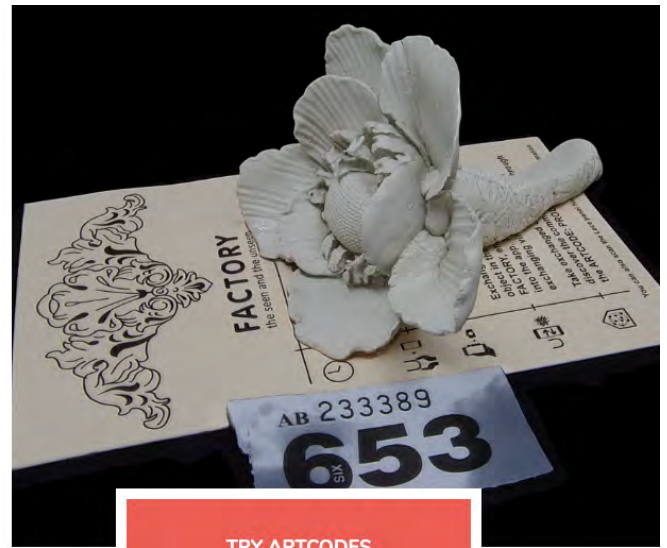
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Culture 24

Case Study: Artcodes and ScannerBox at Tate Modern

Clock in and participate in a clay production line

In 2017, artist Clare Twomey transformed Tate Exchange, a programme space at the Tate Modern museum in London, into a factory making everyday objects from clay to explore ideas around the concept of production. Visitors could clock in, join the production line, and learn the skills of working with clay. They could exchange what they made that day for another person's tea pot, jug or flower from the factory – to take home and keep.



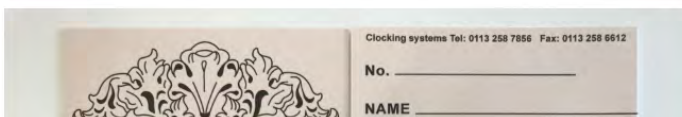
[TRY ARTCODES](#)

Learn how to use Artcodes and test how they work within your museum.



To enable this exchange, **Artcodes** featured throughout the factory. When visitors arrived, they received a clocking-in card with an Artcode unique to each visitor. Other Artcodes were placed at each section to allow visitors to clock into each station they participated at. The Factory exhibit had a corresponding Factory smartphone app that visitors could use to log their progress through the factory.

At the end of the production line, the ceramics were virtually “burned” using the **ScannerBox** workflow, allowing visitors to take home a virtual replica of the object they had created.



visitors came from, which was asked in the first part of the event, and red pins show where they took the object to (i.e., where they live), which was asked at the second part of the event.



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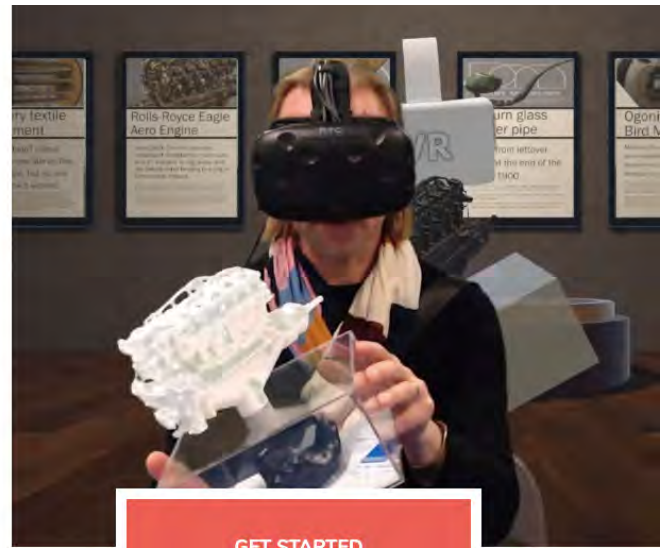
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then culture

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VRtefacts

Touch and tell about museum objects

VRtefacts puts visitors into a Virtual Reality experience where they explore and touch 3D models of museum objects and share stories about them.



[GET STARTED](#)

The workflow is available from vrtefacts.org.

The Visitor Experience



Put on the VR equipment provided by the museum.



Take your time touching and exploring the object from all angles.



Tell a 'story' that the object makes you think of (a memory or a thought) and share it if you like.

What is the experience like?

VRtefacts is a VR storytelling experience. Visitors can touch an object that has been 3D scanned and overlaid in VR onto a physical 3D print. In the end, visitors are invited to share a personal 'story' that comes to mind.

How to implement it?

VRtefacts is a workflow that lists hardware and skills necessary for producing the experience. You can customise the experience by scaling up or leaving out elements, for instance the storytelling element.

Why use VRtefacts?

Visitors can touch objects that they couldn't touch otherwise. When visitors touch and tell their personal stories, they experience an increased sense of connection to and understanding of the object.



Case Study

A novel and 'real' experience of objects

Read about how VRtefacts proved to be an enjoyable and immersive experience for visitors at Derby Museums.

[Learn more ...](#)



“

Telling stories brings the object a bit more life, rather than just thinking about what happened to it.

- Visitor, Derby Museum

“

It's probably the most positive virtual reality experience that I've had, and I think that was to do with the touch bit.

- Visitor, Derby Museum

“

Actually having something there that people can touch and feel and can see properly, I think it's quite a good thing to do.

- Staff member, Derby Museum

Jocelyn Spence and Dimitrios Darzentas from University of Nottingham talk us through the VRtefacts system in these episodes of Computerphile:



How to use?



3D-scan the museum objects – use [the ScannerBox workflow](#).



3D-print the 3D-scans.



Read through our advice on how to make the most of a VR investment.

What are the technical requirements?

More information on technical requirements, guidelines, documentation and software templates is available at vrtefacts.org.

Can the tool be customised?

VRtefacts is by design an approach that is meant to be customised for each individual venue's needs, budgets, and capacities. From the objects and the environment they are shown in, to the way the stories are captured, each aspect can be adjusted to fit the theme and purpose.

How will the tool be supported?

VRtefacts is launching as a series of experiences with several museum and gallery venues, and is branching out beyond VR into AR (Augmented Reality) experiences. Follow the developments at vrtefacts.org.

GET STARTED

Credits / VRtefacts:

Design and Development: University of Nottingham.

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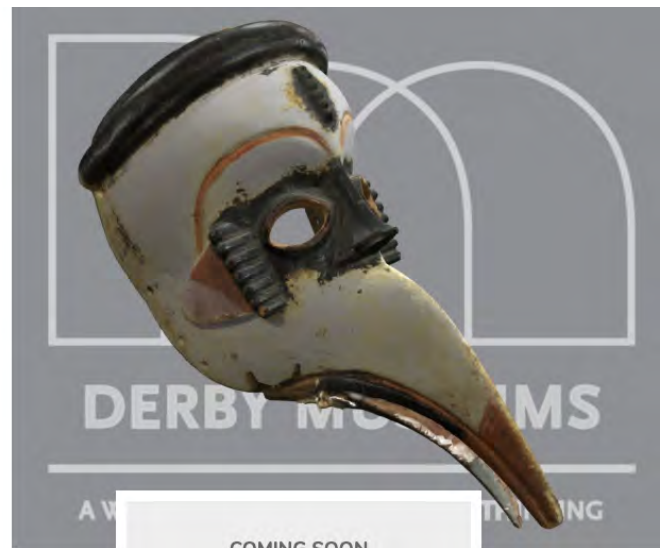
europæana
MUSEUMS

Culture /

Case Study: VRtefacts at Derby Museums

A novel and 'real' experience of objects

VRtefacts was deployed for the first time at **Derby Museum & Art Gallery** on 22 and 23 May, 2019. This was an initial exploration of how they might use Virtual Reality Storytelling for their new **Museum of Making**, scheduled to open in 2020. VRtefacts uses a combination of subtle techniques that led to fascinating, heartfelt, and insightful stories.



VRtefacts is due to be available by late November 2019.



VR was enough of a novelty factor to entice the curious. Introducing touch provided a surprising new element even for experienced VR users and proved to be enjoyable and/or immersive for nearly everyone. Storytelling made the objects feel more real, more personal, and often more engaging for most visitors. More than a few felt inspired to learn more about the objects and/or felt that they had learned something new about them, even though they had not 'learned' new facts from the curators.

The manipulation of scale and substance in 3D prints allowed for new connections and insights. We also used 3D scans with no associated 3D prints. These were scaled to fit within an (actual) acrylic vitrine, which afforded many of the same types of interaction as the 3D prints. Visitors got to experience one printed object and one scanned object.





A 3D scan with no associated 3D print, seen in the real world and in VR.

The visitor's experience was led by trained researchers who used carefully scripted techniques to lead visitors who might be intimidated by the prospect of being recorded to a point where they could comfortably give a coherent, personal response to their object. Part of this transition was made possible by a camera and lights that exist solely in the VR environment. These contributed to a sense of significance that can enable the positive elements of storytelling without generating stage fright.



The storytelling setup in the VR environment.



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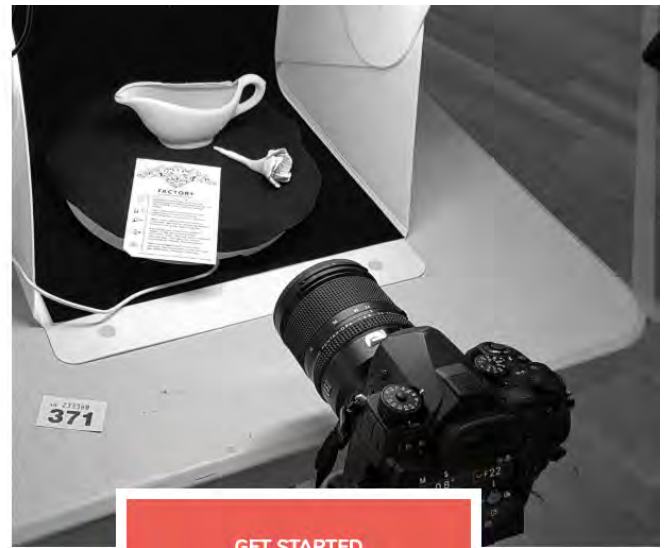




ScannerBox

Create interactive 3D models of objects

ScannerBox is a workflow that enables you to generate interactive 3D models of objects in your collection or contributed by visitors.



[GET STARTED](#)

The workflow is available from the Mixed Reality Storytelling research site.

What can visitors do with 3D models?

The 3D models can be shared online to enable interactive experiences of museum objects. Visitors can also turn their personal objects, or things they made during their visit, into 3D models that they can keep and share.

How do you implement ScannerBox?

ScannerBox is a workflow that lists hardware and common skills that are necessary for producing 3D models. It spells out the process in simple terms, and introduces methods for effectively sharing the 3D models.

Why use ScannerBox?

The workflow enables museums – and visitors – to digitise their objects in a far more detailed and useful way than a simple photograph. The outputs can be seen, shared, and interacted with on any platform.



(Tate - Factory) Object 653 by Mixed Reality Lab on Sketchfab

Case Studies



Participation

Tate Modern

Tate Modern used ScannerBox to scan what visitors made at a clay production line.

[Learn More ...](#)



Participation

National Museum in Belgrade

The museum used ScannerBox to let visitors scan personal objects and share their stories.

[Learn More ...](#)

“

Once I realised that we pretty much already had all the skills and equipment, I was amazed! We had our first model online the same day and now the whole team wants to get involved.

- Cultural Heritage Preservation Specialist

“

That's wonderful! We can let visitors keep something from their experience and share it, even if they can't keep the real artefact they made.

- Artist

“

I immediately posted the link to the 3D model on my Twitter. The model pops up straight in the post. My dad said we can 3D print a copy later too!

- Visitor

How to use?



Let ScannerBox help you choose a camera and get it set up.



Photograph the object from as many angles as possible – ScannerBox will show you how.



Let ScannerBox find the right software for you and show you ways to use the 3D models.

[GET STARTED](#)

Credits / ScannerBox:

Design and Development: University of Nottingham.

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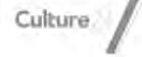


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Case Study: ScannerBox at National Museum in Belgrade

Exhibiting visitor objects and stories

You are walking the corridors of the National Museum of Serbia. Strolling down majestic exhibition halls you browse through prehistoric and medieval artefacts as well as modern artwork by major European artists such as Picasso, Van Gogh and Mondrian. On the side of an old painting depicting a battle scene you find a label with a hashtag written with a peculiar font, saying: "#war". You scan the label with your phone, and suddenly the phone's camera projects a virtual object in front of you: A red triangular warning sign that reads "MINES". Below it, a text appears:

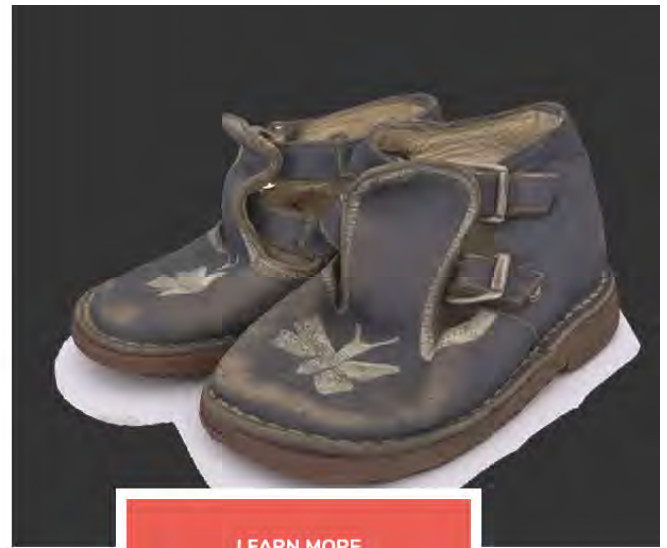
"Serbian Sarajevo, winter of 1995, Dayton agreement just signed. I'm twenty-two years old and filming a documentary film. The surrounding streets all barricaded, everything is ruined, abandoned, the buildings are riddled with shrapnel. The street before me is empty, without a living creature in sight. I spot a single rope across it with a red sign hanging that reads "mines". I walk up to it and take it down, without fear and without logic I decide to keep it as a souvenir. I keep the MINES sign as an anti war protest sign, in preparation, because there will be more of them to come."



Minefield sign by National Museum in Belgrade on Sketchfab

This is a part of the "Your Stories" project, in which the National Museum of Serbia has invited citizens to virtually "donate" mundane objects of great personal importance to them. In collaboration with NextGame, the museum used **ScannerBox** to scan and exhibit the objects as virtual 3D models along with a short text explaining the significance of the object for the person who donated it. This collection of virtual objects attached to physical museum objects sets up a participatory exhibition – a "people's museum".

Several dozen objects were contributed for scanning, with **46 high-**



[LEARN MORE](#)

Visit the ScannerBox site at Mixed Reality Storytelling to learn more.

Several dozen objects were converted for scanning, then **high-quality 3D models** being produced and made available through the museum's public channel.



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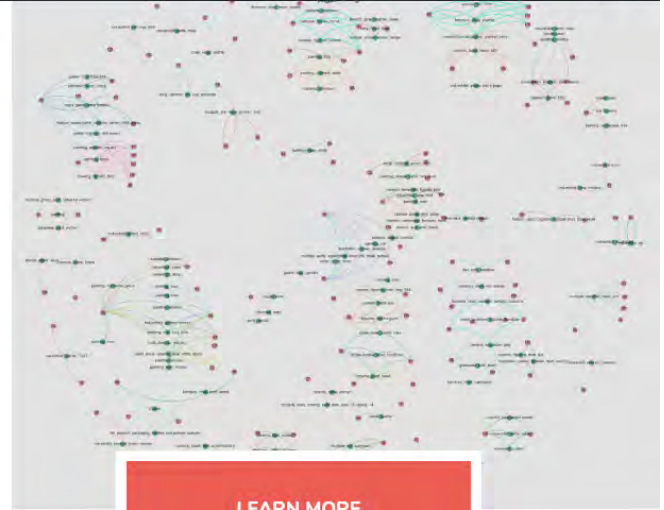
Culture /



Gift Viz

Visualise data for analysis and insights

Gift Viz is a workflow that guides you to make insightful visualisations of data captured from gifting experiences.



[LEARN MORE](#)

Learn more about Gift Viz at the Mixed Reality Storytelling research site.

When to use?

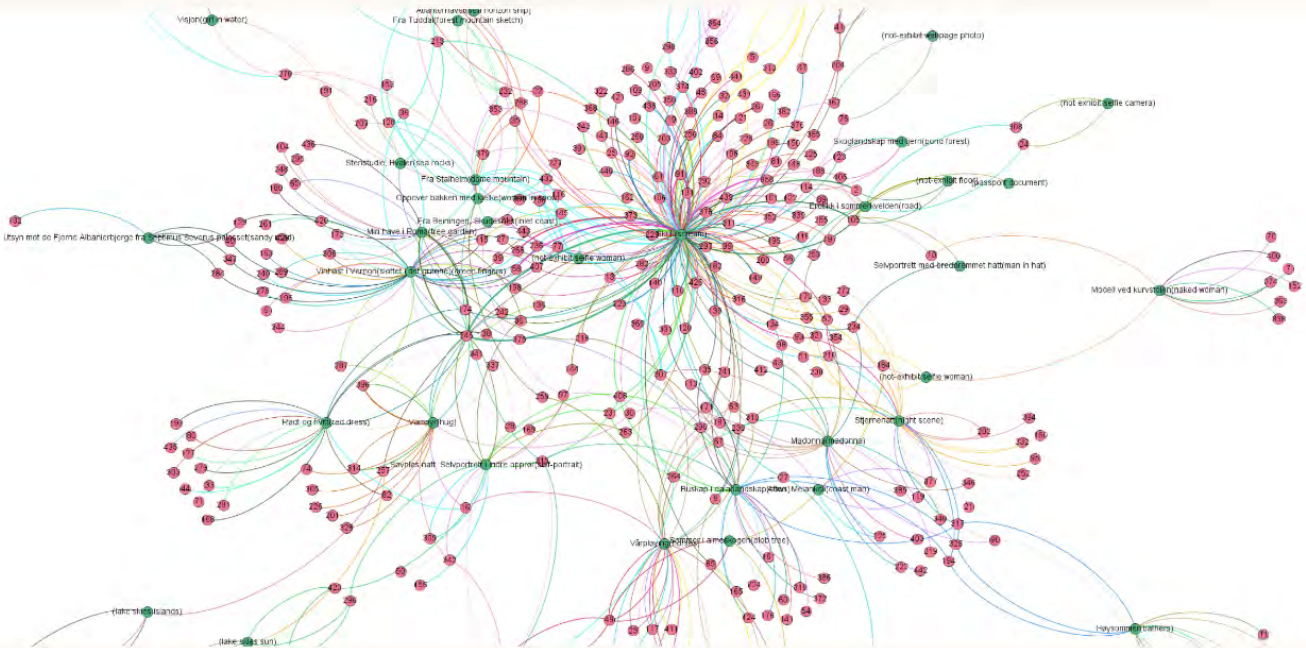
When you implement a gifting experience such as the **Gift app**, it creates valuable data. Gift Viz helps you unlock insights from these data through interactive visualisations.

How does it work?

Gift Viz is a prototype method that uses Network Graph to visualise elements of an experience and relationships between them. The workflow details how to prepare data, generate visualisations and identify insights.

Why use Gift Viz?

Digital technologies produce data. Through appropriate visualisations this data can become useful information about audiences and exhibitions that you can use to make decisions.





I can see which of the users really engaged with the platform. Perhaps I can see what made the difference.

– System Designer



These do help me pinpoint trouble spots. For example, why has no one looked at this exhibit?

– Designer

How to use?



Create your experience.



Follow the Gift Viz guidelines to prepare your data.



Analyse and reflect on your data.

What are the technical requirements?

Gift Viz is a workflow that guides you through best practices of preparing data captured by digital systems for transformation into interactive visualisations. The technical work is specific to the experience being created, but not specific to any particular visualisation software.

Can the tool work with any Gifting experience?

The Gift Viz workflow can potentially be relevant for any system or experience that uses data for its function.

How will the tool be supported?

Gift Viz is an ongoing project that is currently being refined to become an integral part of every appropriate Gift output so that they can create comparable data visualisations. As an intentionally software-agnostic workflow, its approach is flexible and should be relevant for future software implementations.

Credits / Gift Viz:

Design and Development: University of Nottingham.

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Ways of Working

We gathered **10 prominent museums** and asked them to experiment and reflect. The result is a set of recommendations and examples that might inspire you to work differently. One part focuses on practical challenges for designing digital visitor experiences, the other on organisational challenges. Read more about [how we developed our recommendations](#).



Experience Design

Spend time on ideation

We recommend things to do and methods to try out – all about practising ideation in a museum context.

[Learn More ...](#)



Organisational Change

Improve your work practices

We recommend things to think about, things to do and things to explore further when you seek to create change across your organisation.

[Learn More ...](#)

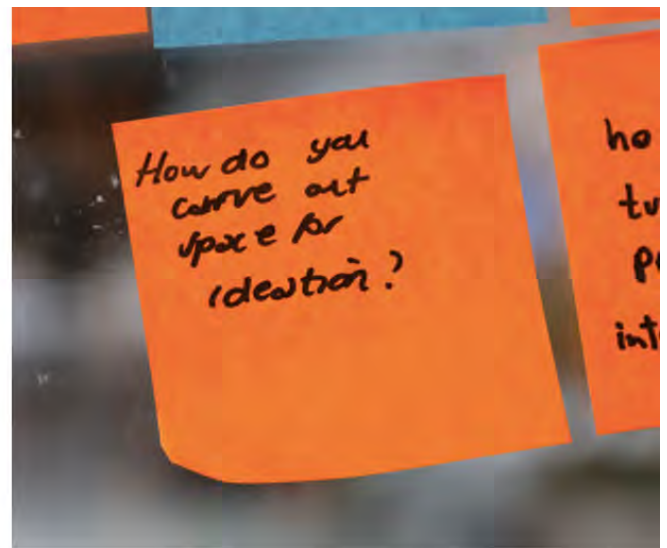


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Experience Design

Spend time on ideas to make richer experiences

In **the GIFT Action Research**, researchers and 10 museums from EU and USA collaborated to better understand practical challenges for designing digital visitor experiences. We recommend things to do and methods to try out – all about practising ideation in a museum context.



Post-it from one of our workshops.

What we recommend:



1. Start with purpose & people

Where do you start when you want to design a digital visitor experience? Actually, you don't start with digital at all...



2. Collaborate on ideas

As soon as you've decided on some kind of idea, invite relevant stakeholders to take part...



3. Test ideas

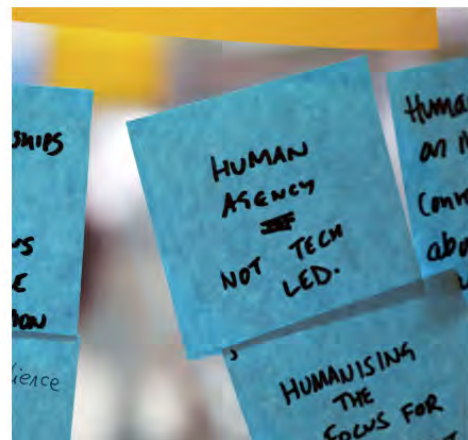
Does your idea make sense? Immediate testing is a shortcut to learn more about your ideas, and whether they work or not...

1. Start with purpose & people

With our group of museums, we discussed how tech ideas sometimes dominate design projects. Instead of implementing the latest gadgets and making 'shiny' solutions, we found that richer experiences come out of putting purpose and people first.

Things to do

- Start by thinking about what problem you are trying to solve and how you can learn more about the people for whom it is relevant.



- If colleagues or other people say “we want an app” or “let’s do VR”, encourage them to reflect on why and for whom.
- Always try to describe what you seek to do without using tech language.
- Try out **the VisitorBox Ideation Cards** to get technological ideas with point of departure in purpose and people.



“

This is so important! A lot of people tend to start with tech because it’s trendy or shiny and don’t have any idea why it would, or if it would, be useful to the thing they’re trying to do. At this stage it should just be a project – digital is a potential route but may not be.

- Sarah Younas, Digital Producer, Tyne & Wear Archives & Museums

“

We have been looking into VR tech to see how we can welcome people who can’t physically go to the museum. Unfortunately most existing VR solutions are developed for individualistic or commercial purposes. Our purpose is different – it’s not entertainment, it’s not marketing, it’s more about dialogue, community and very much diversity. Therefore we decided to build a new VR solution that supports this purpose.

- Katrine Pedersen, Head of Education, ARKEN

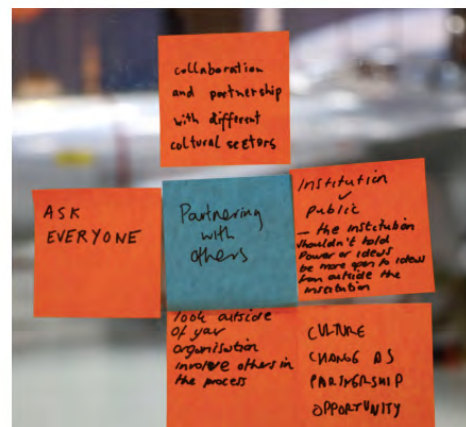


2. Collaborate on ideas

With our groups of museums, we reflected on how museums tend to bring in others too late – co-workers, technologists, content creators, visitors and other stakeholders. We noticed how this typically causes problems and limits innovation.

Things to do

- Abandon the idea of having a clean start: Think about how you can learn from and build relations with other projects.
- Remember that there is no such thing as a common language: Spend



time on developing shared understanding across collaborators.

- Let collaborators know why they are invited, yet be open: If you know exactly what you're asking somebody for, you will never end up anywhere new.
- Try out **the ASAP Map** – a paper based tool that helps you strengthen your ideas together with your collaborators.

“

Internal and external forms of collaboration are crucial, and both require staff to be more sensitive and to spend more time listening than many think is worthwhile. But we must take the time to listen and use sensitivity in our responses.

- Deena Chalabi, Curator, SFMOMA

“

Without all stakeholders involved from the very start, you're building in a potential problem further down the line. If you spend months working on what your audience is and what your approach is going to be, and then try to explain that to digital technologists, they'll be like: what do you actually want? Because they haven't been involved in the process – the conversation.

- Daniel Martin, Head of Curatorship and Curator of Making, Derby Museums



3. Test ideas

With our group of museums, we discussed a typical resistance at museums towards showing things in the making. In contrast, we found that working experimentally, making tests and small outputs, better support innovation.

Things to do

- Let go of control. To be able to innovate, you have to take risks and sometimes even fail.
- Think of harvesting rather than just documenting experiments:



- Harvest insights that can help you and your organisation grow.
- Remember to share learning across your museum: Be generous with your findings even if there were disappointments.
 - Try out **the Experiment Planner** – a paper based tool that helps you plan an experiment to test your idea.



“

In museums, we tend towards wanting things to be very polished and perfect, thoughtful and considered. And sometimes a really rough paper prototype can actually be a really good way to get at an idea and communicate it.

- Erica Gangsei, Head of Interpretive Media, SFMOMA

“

We developed three ideas, eliminated one after the other and landed on an idea that we thought was strong: We wanted to make an experience where people would draw on a digital surface and compare it with a Munch drawing that resembled their own in terms of content matter. In a second step, we tested this experience on a very low scale, using paper. And it didn't actually take that much time to figure out that it wasn't fun and interesting at all for the users. So we just had to discard the whole concept.

- Nikita Mathias, Project Coordinator for Digital Visitor Experiences, The Munch Museum



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The GIFT Action Research

Experiment and learn together

That was the ambition of the GIFT Action Research where 10 museums from EU and USA made experiments, discussed learning and took part in developing knowledge and methods for the museum sector. The process was managed by researchers from [ITU](#) and facilitators from [Culture24](#).



What we did

The GIFT Action Research is part of [the GIFT Project](#) that seeks to help museums create deeper personal encounters with cultural heritage for their visitors in physical and digital realms.

At 5 workshops, researchers and museum professionals collaborated to better understand the practical and organisational challenges in undertaking this work.

The museum professionals were supported to run small scale experiments in between workshops. These experiments investigated the challenges further.

Recommendations

Through the GIFT Action Research, we developed recommendations on:

1. **Experience Design** – these recommendations were developed by testing design approaches as part of making experiments.
2. **Organisational Change** – these recommendations were developed as a concluding step in the process, using the 'How Might We' method, inspired by Derby Museums' [Handbook on Human-Centred Design](#).

The recommendations include concrete methods and examples – all developed in close collaboration between researchers and museum professionals.

Participating Museums



Arken Museum of Modern Art
Denmark



Brighton Museum
UK



Centro Arti Opificio Siri
Italy



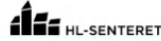
Danish Museum of Science and Technology
Denmark



Museum of Making
UK



The Munch Museum
Norway



The Norwegian Center for
Holocaust and Minority
Studies
Norway



Royal Albert Memorial
Museum & Art Gallery
UK



San Francisco Museum of
Modern Art
USA



Tyne & Wear Archives &
Museums
UK



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Organisational Change

Improve your work practices to excel digitally

In **the GIFT Action Research**, researchers and 10 museums from EU and USA collaborated to better understand organisational challenges for designing digital visitor experiences. We recommend things to think about, things to do and things to explore further when you seek to create change across your organisation.



Post-it from one of our workshops.

What we recommend:



1. Systems

Make better connections between collections and storytelling...



2. Culture

Create a bold and open culture and acknowledge that failure is a part of innovation...



3. People

Create a more nuanced way of thinking about people...



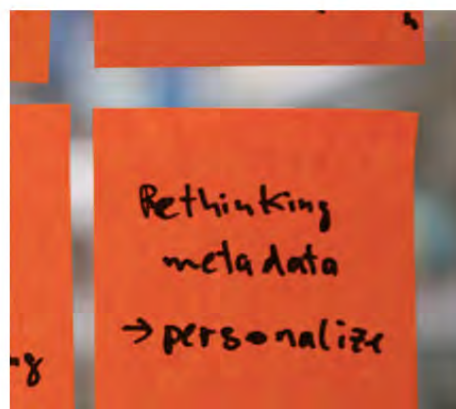
4. Understanding

Develop shared ways of understanding and explaining the value of your work...

1. Systems

Many museums have begun digitising their collections content. With our group of museums, we however discussed how this content often isn't fit for the purpose of telling engaging stories.

We found that a key reason for this is that accompanying metadata is often limited in its usefulness for more human centred forms of storytelling. Existing collections metadata tends to focus on traditional 'object focused' museological and historical interpretations, rather than alternative 'people focused' interpretations that could, for example, relate to the inspiration or impact that an object has on someone...



to the inspiration or impact that an object has on someone.

In response to this issue, we wondered:

How might we make better connections between our collections and storytelling?



Things to think about

- Are you treating your collections as a singular form of information, explained in one type of way, and framed for people with specific and obvious interests? If so, are you making the most of this asset? Find out who else might be interested in your collections and why in order to develop more varied interpretations.
- Recognise that human stories are as important as object stories. Don't view your objects as the sole focus. Regard them as the 'raw material' that prompts additional human stories to be told.
- What can you learn about storytelling from other disciplines and sectors? What other assets can you draw upon, in addition to your collections?

Things to explore further

- **Museum Crush:** A platform sharing objects found in museums.
- **GLAM WIKI:** A wiki on how to use Wikimedia to produce content.
- **Storythings:** A website on telling stories.
- **Blog post by Melissa Terras** on reusing digital content.
- **Blog post by Jennifer Staves** on choosing storytelling over blogging.
- **Blog post by Chad Coerver** on content strategy.

Things to do



Derby Museums

Embed human elements

Find ways to embed human elements more directly in your collecting practices and systems. See how Derby Museums experimented with making content more human.

[Learn More ...](#)

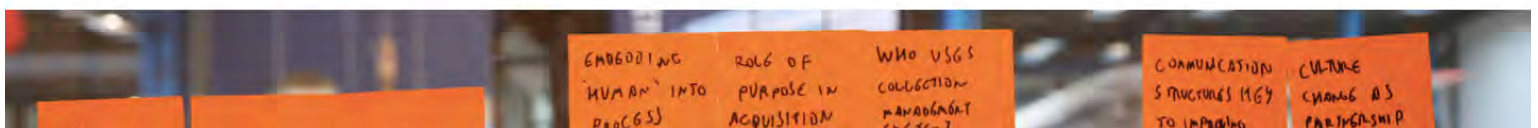


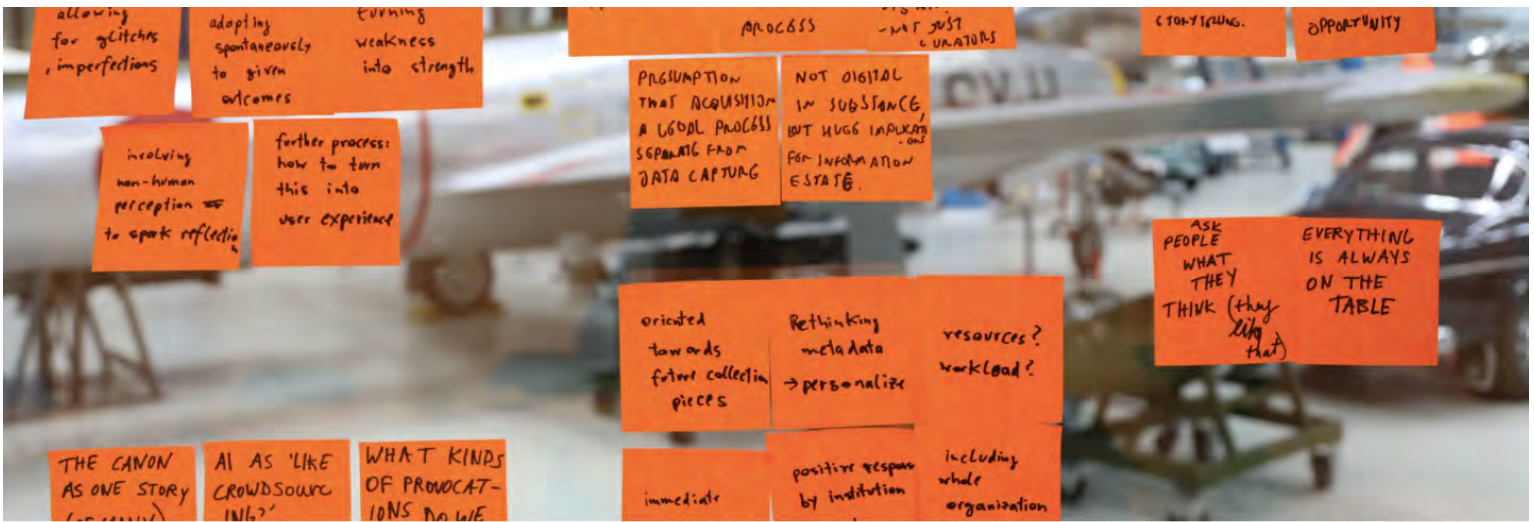
Brighton Museum

Trigger alternative stories

Look for alternative ways to trigger surprising insights about objects that can help you tell different stories. Learn how Brighton Museum used AI functionality in their CMS system to trigger provocations.

[Learn More ...](#)





2. Culture

With our group of museums, we discussed how, for some museums, the existing internal culture can often be siloed, risk averse, rigid and bureaucratic. Such cultures are often inherited from more traditional structures and models of working in museums.

We noticed how this was increasingly incompatible with fostering innovative digital practices. On the contrary, we found that such practices rely on open and collaborative discussion, ideation and experimentation – with room for taking risks and sometimes even failing.

We therefore wondered:

How might we create a bold and open culture in museums, including an acknowledgement that failure is a part of innovation?



Things to think about

- It's hard to create a bold and open culture simply by saying that's what you want to do. It's easier to try out new approaches and reflect on how bold and open these make you.
- Do you know how much untapped enthusiasm for change exists already amongst your colleagues? If not, find out. You might be surprised that you have lots of existing enthusiasm to work with.
- How can you create momentum by allying with like-minded people in your organisation?
- Can you give your staff a mandate to stand outside their roles to be themselves, to respond to personal values and motivations and to feel comfortable expressing different views?
- Can you create a safe and supported space for staff to express themselves honestly and how do you embed this

Things to explore further

- **Human-Centred Design Handbook:** A handbook by Derby Museums.
- **Blog post by Matt Locke** on strategy, culture and rhythm.
- **Interview with Carolyn Royston** on tech lunches for museum staff.

space into the normalised structures and processes of your organisation?

- Can you lead by example to differentiate 'failure' from 'shame'? Can you be honest, and thus encourage colleagues to be honest, about what has failed and what you've learned?

Things to do

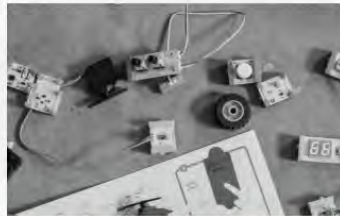


The Munch Museum

Start small

Focus on changing a specific activity, process or system and use this as the basis to discuss wider changes. See how the Munch Museum got from discussing website changes to organisational transformations.

[Learn More ...](#)



Tyne and Wear Archives and Museums

Fail and experiment

Run an activity on failures and create the conditions for staff to be more playful. Read reflections from Tyne and Wear Archives and Museums on running failure cafés and prototyping sessions.

[Learn More ...](#)



Danish Museum of Science and Technology

Depart in passion

Ask colleagues what inspires and motivates them and use this as a basis for shared ideation and discussion. Learn how Danish Museum of Science and Technology asked staff about their favourite objects.

[Learn More ...](#)



The HL Center

Collaborate across departments

Work beyond the confines and interests of individual departments to explore common goals and dynamics. See how the HL Center worked across departments to find playful and inclusive strategies.

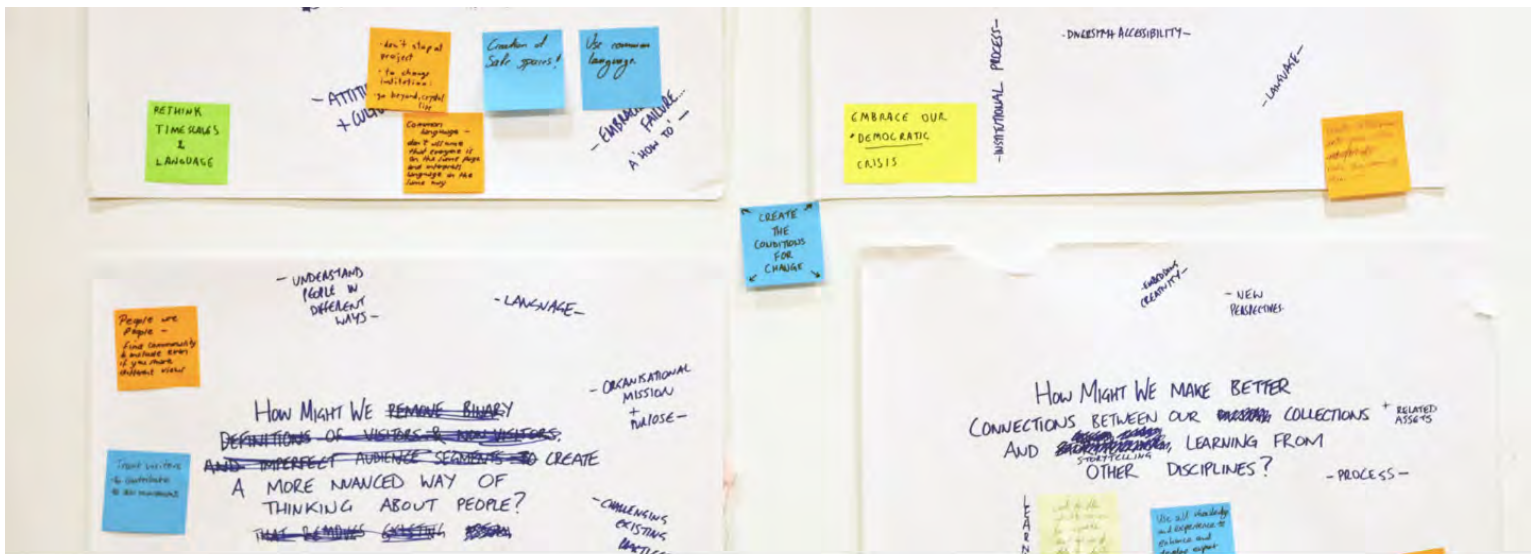
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HOW MIGHT WE CREATE
A BOLD AND OPEN CULTURE IN
MUSEUMS, ^{IN WHICH WE} ~~WE~~ ACKNOWLEDGE ^{THE} FAILURE
AS PART OF INNOVATION?

- INTER
CROSS

- PRACTICAL -

UNDERSTANDING AND EXPLAINING THE VALUE
OF OUR WORK, INTERNALLY AND EXTERNALLY? - TALK!



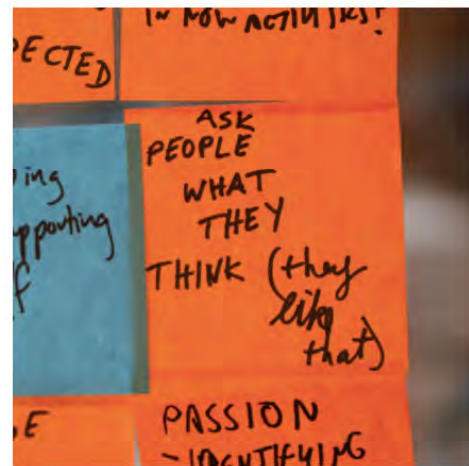
3. People

With our group of museums, we reflected on how existing approaches to engagement in some museums tend to rely on narrow and assumed interpretations of who people are and what they want, according to specific demographics or binary audience segmentation. We discussed that these approaches were distanced from reality, as people don't conform neatly to these predefined segments. They have (unsurprisingly!) varied interests, motivations, values, and behaviours.

We felt that many museums need to better understand people, not as types belonging to certain categories, but as human beings.

So in response to this issue, we wondered:

How might we create a more nuanced way of thinking about people?



Things to think about

- How do you give people the space to talk about themselves from their perspectives, rather than framing it around museum needs?
- Can you develop creative methods to engage different, more human perspectives, such as imagination and critical thought?
- If you feel like you don't have the skills and tools to gain nuanced insights about people, consider getting help from external design partners. Even a one-day workshop will leave you with valuable insights about people.
- Recognise the limits of audience segmentation models: Consider a 'both/and' approach – segmentation models are useful, but since you are building for a future that doesn't yet exist, you don't want to be limited by these existing models. Keep one foot in imagination.

Things to explore further

- **The Common Cause Handbook:** A handbook on values by PIRC.
- **Teen Night at the MET:** A teen takeover event at the MET.
- **The Five Minute Falk:** A quick intro to identity related motivations.

- Reflect on your role as a museum institution and the authority that is associated with it: How do you feel about giving up control and authority in order to invite the opinions, ideas and creativity of your visitors?

Things to do



RAMM

Ask people

Whenever you have an idea for a project or activity, ask people what they think. Learn how RAMM improved their digital stories through visitor inputs.

[Learn More ...](#)



CAOS

Give up control

Let others take over your space. If you feel uncomfortable with such a radical step, try to define a smaller space. See how CAOS ran a teen takeover.

[Learn More ...](#)



Derby Museums

Step outside

Instead of expecting people to come to you, meet them where they are and try to understand them. Learn how Derby Museums stepped outside to engage non-visitors.

[Learn More ...](#)



4. Understanding

With our group of museums, we discussed how museums often don't have a shared way of understanding and articulating the value of their

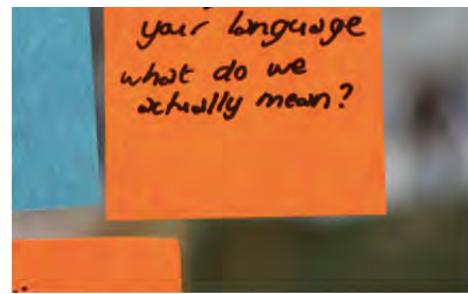


work. We felt that this can often lead to challenges in working collaboratively, both internally and externally.

We felt that a reason for this could be a mismatch between different ways of understanding: Traditional ways seek to preserve existing forms of knowledge and showcase established narratives; whereas novel ways, influenced by digital culture, seek to facilitate more democratic forms of knowledge construction and create other forms of narratives.

So in response to this issue, we wondered:

How might we develop shared ways of understanding and explaining the value of our work?



Things to think about

- How can you support your colleagues to build in time to reflect on their work practices, particularly focusing on how they interpret different concepts through their work?
- Recognise the importance of having a shared language – and the differing assumptions that might exist within an organisation around the meanings and use of specific words.
- How do you harvest results of previous work into new work in order to keep developing? How do you bring learned lessons back to yourself and your organisation?
- How can you build trusting relationships among colleagues? How can you foster a culture of openness, camaraderie, and distress tolerance as culture changes?
- How can already existing communication tools and forums at your museum be employed in a better way to overcome silo thinking and encourage negotiation of common values and goals?

Things to explore further

- **One by One Project:** A project on building digital confidence.
- **Let's Get Real 6:** A project on the social purpose of digital technology.
- **The Impact Playbook:** A guide to assessing impact.
- **The MASS action toolkit:** A toolkit on museums and social action.

Things to do



The HL Center

Discuss pertinent concepts

Discuss pertinent concepts to understand divergent perspectives and



SFMOMA

Reflect on social purpose

Collaboratively reflect on the social purpose of your institution and how



The ASAP Map

Develop shared understanding

When you initiate a project, develop

come up with criteria for shared understanding and work. Learn how the HL Center explored the concept of 'playfulness'.

[Learn More ...](#)

that relates to your values, motivations and work. See SFMOMA's reflections on being a bold and innovative museum in the future.

[Learn More ...](#)

when you initiate a project, develop shared understanding about the purpose and how it fits with what your museum is already doing. Try out the ASAP Map – a design tool that helps you develop shared understanding.

[Learn More ...](#)



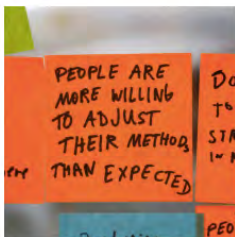
Change Strategies

We found three common themes on how to create the best conditions for change.



Don't try to create change

If you set out with the objective to create change, it's often hard to know exactly what change you need to make happen, how this happens or how likely you are to make it happen. Even if successful, how sustainable would it be? What happens when presented with future challenges? Do you need to start over? Focus instead on creating the right conditions for change to happen, achieved through both 'hard' interventions (structures, systems, processes) and 'soft' interventions (people-oriented). This enables museums to change more dynamically and organically, without having to prescribe exactly what it is or how it is achieved at the outset.



Treat change as people-related

In our discussions, we found that the more successful actions focused on the personal and human aspects of change rather than the organisational. The work of museums in seeking to change the way they engage visitors is fundamentally a case of a group of people trying to engage with another group of people. It's easy however to overcomplicate this and get distracted by organisational structures, processes and audience segmentation. Focusing on the personal or human aspects of change therefore becomes essential to success.

Remember that museums are made by people – that we are structured but also that we *are* structure.



Enable all staff to become change agents

We noted how effective leadership is an important catalyst for successful change and we discussed lots of examples where the actions of senior leadership had both a positive and negative impact on enabling change. We however also noted how leading change could be done by all kinds of staff, and indeed, there was an untapped well of enthusiasm from staff to want to make change happen. We agreed that it was vital that each staff member felt empowered to own and effect change. And that any suggested responses to change considered how an individual staff member could support it through individual actions.



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Culture / 16

Experiment Recap: Derby Museums

Making content more human by improving our collecting practices

by Daniel Martin, Head of Curatorship and Curator of Making, *Derby Museums*

In connection to [the GIFT Action Research](#), we wanted to explore how we might make our collections metadata more human to have a better tool for creating human-centred experiences. We found that we actually didn't have to reinvent the wheel: Small editorial changes to our forms and systems could encourage curators to focus more on human-centred information when collecting objects.

What did you want to find out?

We wanted to find out how we might make collections metadata more human as a means of creating people-centred interpretation, narrative and sustainable documentation around collections.

What did you do?

We worked through our existing entry processes, entry forms and digital Collections Management System (CMS) to see if they were fit for purpose. We then trialled new forms and acquisition conversation prompts for curatorial staff to begin gathering more human-centred information at the point of entry.

Was it successful?

At this point, it's hard to tell. The process has only been running for a comparatively short time but the latest records do contain more narrative and people-centred information.

What did you learn?

That reinventing the wheel is not necessary to make meaningful changes to organisational processes. And that our museum is uniquely placed and run in terms of being responsive and open to changes like these – this may not be possible across the museum sector.

What surprised you?

That staff felt these existing processes needed updating but no one had voiced this in the curatorial forums we already have in place. We need to encourage even more openness than we do.



Image from Derby Museums Trust.

What methods or tools did you use?

Derby Museums' [Human Centred Design Handbook](#).

What other resources did you use?

The accreditation scheme for UK museums to ensure that we're statutorily compliant when changing core collections processes.



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Experiment Recap: Brighton Museum

AI as provocation rather than solution

by Kevin Bacon, Digital Manager, Brighton Museum

As part of [the GIFT Action Research](#), we ran an experiment that showed how AI could trigger surprising interpretations of objects. This is useful as a provocation for our curation practices – a way to come up with different stories about our objects. As a bonus, the experiment provided ideas about how to develop a more audience-centric approach to digitisation.

What did you want to find out?

Whether an AI driven autotagging feature in our digital asset management system could be used to improve documentation practices by humans. The theory was that if only about 50% of these AI created tags are accurate, could the mistakes encourage the creation of new, correct data that would have not been captured had the mistake never been made?

This is based on the idea that AI may function better as a provocation rather than a solution. If the accuracy of AI is questionable, the benefits may lie in AI being able to recognise marginal elements of a visual record that a human would overlook. For instance, a curator might record the identity of a portrait subject and the date it was painted, but omit to mention the hat she wears.

What did you do?

There were three stages to the experiment:

1. We invited two members of staff to write basic descriptions for a series of random objects from the collections.
2. After writing the descriptions, each member of staff was asked to check the AI created tags, remove incorrect ones, and add new ones.
3. Having corrected the tags, each staff member was then asked to return to the description and see if the experience of inspecting the tags would encourage them to change the descriptions.

Brighton Town Hall, 1870s



Testing the autotagging feature. @ Brighton Museum.

Experiment Recap: The Munch Museum

From website discussions to transforming the organisation

by Nikita Mathias, Project Coordinator for Digital Visitor Experiences,
The Munch Museum

Good things happen when people across departments meet and think together! As part of **the GIFT Action Research**, we ran two workshops to discuss how to employ our digitised collection at our new website. The discussion ended up being about much broader ideas on how to transform the organisation – by establishing hackathons and a tech lab as tools for organisational change.

What did you want to find out?

We wanted to explore what kind of culture and structures we need in our organisation in order to find valuable and productive solutions to better connect our collections and storytelling.

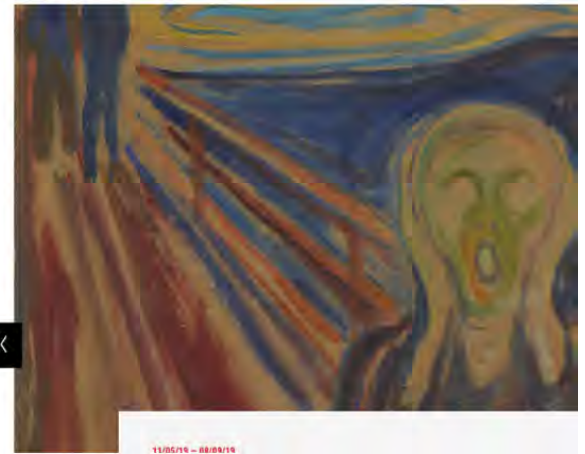
What did you do?

We ran two workshops, with a length of two hours each, with the following participants:

- A curator working on an exhibition project that attempts to connect to the Museum's online collection.
- The project leader responsible for the new website of the Munch Museum (that will also facilitate the online collection).
- The project leader responsible for digitising the museums collection.
- The IT director (involved in the new website project).
- The project coordinator for digital visitor experiences, co-curator for the exhibition mentioned above and involved in the new website project.

What all participants have in common is that they work in one way or another on and with our digitised collection. The first workshop was very structured and focused on the question of what kind of organisation it takes to successfully employ our digitised collection for entertaining, interesting and personal art experiences on the new website of the Munch Museum. How do we have to run and organise the project in order to succeed?

The second workshop happened because of the enthusiasm and productive atmosphere in the first one. At this second workshop, we had a more open discussion about potential solutions for transforming our organisation.



Was it successful?

Yes, both in terms of the quantity and the quality of the ideas we came up with. The most tangible ones were establishing hackathons as a tool for organisational change and for establishing a culture of productive failing, as well as a tech lab. Both ideas are still alive in our organisation, and we try to find ways to realize them.

In addition, the form, process and atmosphere of the workshops were in themselves cases in point for how we want to work at the museum in the future. That is, in small, agile and interdisciplinary project groups that work together in a friendly and productive atmosphere on the basis of mutual respect, thereby overcoming silo thinking within the confines of department structures.

What did you learn?

I learned that good things happen when people from across the departments meet and think together. We find out that we have common goals and ideas, and that we can speak the same language. I realised to a greater degree the potential of new employees who have recently joined the organisation. Their outside perspectives on the structures, routines and culture of the museum are extremely valuable. They bring a disruptive quality (in a positive sense) to the discussion.

What surprised you?

The enthusiasm of the participants. Initially, a second workshop was not planned. It was only due to the motivation and enthusiasm of the participants that we decided to carry on. We have in fact become a small digital think tank at the museum that meets on a regular basis to talk about the digital transformation of the Munch Museum. We (with just a few individual changes) have become formalised as an operative unit working with digitisation at the museum.



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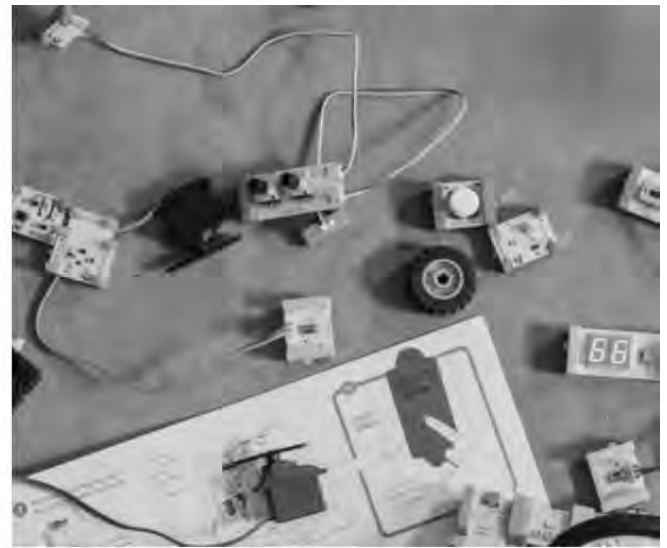
Culture /

Experiment Recap: Tyne and Wear Archives and Museums

From failure cafés to rapid prototyping

by Sarah Younas, Digital Producer, *Tyne and Wear Archives and Museums*

As part of [the GIFT Action Research](#), we wanted to experiment with the concept of failure. 'Failure', however, turned out to be problematic and we ended up doing rapid prototyping as a 'safer' way to encourage a more innovative culture.



What did you want to find out?

We were interested in creating the conditions for testing out new ideas, reducing risk aversion and chipping away at the idea of perfection and that projects cannot be revealed until they are 'finished'. We wanted to create a culture where the 'imperfect' and the 'unfinished' are tested with the public in a cycle where products and projects are constantly being improved as a result of feedback. We were interested in eradicating the notion that 'failure' is a dirty word and something to be ashamed of. We wanted to champion failure and show that it is essential to success and learning.

What did you do?

Originally, we wanted to run a social session for our staff and the cultural sector to celebrate failure. We thought it could be a late event, ran as a stand-up night, with a range of commissioned speakers/thinkers and open mic spots. We decided to scale it back and talked about running a 'failure café' for staff only, where they could come and discuss either personal or professional failure. This did not work out and we ended up just running a small playful rapid prototyping session for staff using LittleBits to invent our own pieces.

Was it successful?

The failure café did not work out. It made people feel nervous and in hindsight, I can understand why. We did not manage to get past talking about it and test it. The rapid prototyping experience brought people along but it brought along the same group of people who are always willing to try new things. The session was fun and it helped engage people in the theme of failure – in that if something does not work, you need to tweak and tinker. But one session alone cannot accomplish much.

What did you learn?

In hindsight, the failure café was probably not the best approach to take. Whilst we are interested in repositioning the notion of failure

take. Whilst we are interested in repositioning the notion of failure, starting by asking people (who do not see the term in a positive light) about their failures is too much. There is a huge barrier surrounding language and assuming that everyone has the same understanding as you do. Many people consider failure as negative and if they admit to it, it will have consequences for them. We have not done the groundwork to allow for a reframing of this perspective yet, so we cannot start there. We need to work towards creating the conditions for the edges to soften. Even though we think that we need to do it more and in lots of different ways, we believe carving out a space for play, tinkering and testing is a good approach in the hope that it will encourage new ideas, risk taking and iteration. From the small amount of engagement we had, we know that we need to advocate and infiltrate other spaces in order to be heard as emails can and will be ignored. But we also know that you cannot convert everyone and nor should you waste all your energy on trying to do so.

What surprised you?

The thing that was most surprising was that the conversation we had about the failure café was very much just a conversation. We did not actually test the idea even though we are a group of people who make up a cross-departmental network designed to generate new ideas and make them happen. I can take a guess and say that yes, probably many people across the organisation would not have come along and would not have shared their failures, but what if they had? Where could we have gone next? Could we have done something radical for our organisation? Something that would have given us a little more kinetic energy to try something different? I am pleased with what we have done in hosting a prototyping session as the start of something but it still feels very safe and it is really about where we go next.

What methods or tools did you use?

LittleBits – electronic building blocks. They are magnetic bits that snap together to turn ideas into working inventions. See this [TED talk from founder Ayah Bdeir](#).

What other resources did you use?

I am extremely fascinated by the work of [Lifelong Kindergarten](#) (LK) at MIT. LK is spearheaded by Mitchel Resnick and they are the team that created Scratch. Their approach is something that I use in a lot of my work and a culture that I am trying to embed in my organisation. It is essentially the idea that as a child in kindergarten you are given the freedom to play, to get messy, to tinker etc. And this is what helps children to learn and be creative. Somewhere along the line you lose that freedom and you do not get to play around anymore. And you do not get to be creative or creativity is something that is lost or is undervalued. Lifelong Kindergarten puts the emphasis on play in order to create. They have an excellent rapid prototyping method, which is simply to: imagine, create, play, share, reflect, repeat. I also really got a lot out of Miguel Sicart's book 'Play Matters.'



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Experiment Recap: Danish Museum of Science and Technology

Passion, dreams and openness as the road to a bolder culture

by Jacob Thorek, Curator, *Danish Museum of Science and Technology*

As part of **the GIFT Action Research**, we wanted to test how we could work differently with passion, dreams and openness in our organisation. Even though we were not able to complete the experiment as planned, we found that there are huge potentials in working with shared issues across different departments.

What did you want to find out?

The experiment focused on how we might create a bold and open culture in the museum, including an acknowledgement that failure is a part of innovation. We wanted to explore this because the museum is going through a transformative process of rethinking the museum and its role in society. Part of this process is a relocation of the museum into a new sight in Copenhagen.

What did you do?

We choose three core areas to focus our work on: passion, dreams and openness. We selected different methods for each area. For passion, we invited all employees to share their favourite object with the rest of the organisation. The intention was to break the power structures between the different departments and to acknowledge the knowledge and passion that everyone in the museum possesses. For dreams, we wanted to make a workshop, where everyone in the organisation could share their dreams about the creation of the new museum. For openness, we wanted to work with the structures of our meetings.

Was it successful?

Parts of the experiment were successful, others were not. We had planned to work on this over a period of three months, but at the beginning of the period, the museum was struck by organisational changes, which meant changes on management level and that a key person left the organisation. It became clear that it's very difficult to challenge the culture in an organisation, when it's shaken by big changes. Even though the initiatives were structured from a bottom-up approach, it's impossible to change the culture during such a critical phase.

What did you learn?



Even though we were not able to complete the experiment as planned, we found that there are huge potentials in working with shared issues across different departments. Every single employee has great knowledge about the museum, which can be used to create more nuanced communication between the museum and the users and non-users. Everyone in the organisation is connected to the museum and has dreams and ideas about how to change it to become more inclusive. And to reflect the dynamics of citizens, which we seek to engage in the important topics of technology, innovation and science.

What surprised you?

It's difficult to work with organisational transformation in a museum. We knew that, and our experiment confirmed it – even if we look beyond the obvious challenges. But organisational transformation is needed if museums want to reflect the society they are part of.



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Experiment Recap: The Norwegian Center for Holocaust and Minority Studies

Working across departments to find playful and inclusive strategies

by *Elise Grimsrud Christensen, Educator, and Hanne Steien, Exhibition Designer, [The Norwegian Center for Holocaust and Minority Studies](#)*

In connection to [the GIFT Action Research](#), we ran workshops to explore how we could develop playful and inclusive strategies for our upcoming extension of gallery spaces. The experiment was a success and we learned that our organisation really needs a space for working cross-departmentally.

What did you want to find out?

We wanted to explore how we might collaborate cross-departmentally with an aim to find playful strategies that stimulate staff's cooperation and excitement for our upcoming extension of gallery spaces.

What did you do?

We applied [our previous insights on the concept of playfulness](#) to the process of creating a more democratic culture within our organisation, focusing specifically on the extension of gallery spaces scheduled to open in 2021. We decided to arrange three workshops for the entire staff using playful methods to explore:

- Future temporary exhibition themes and concepts
- Criteria for an inclusive working process
- Different ways to create metaphorical and physical bridges between historical and symbolic buildings and contemporary museum architecture

Each workshop included a visit to another museum for inspiration and conversations with curators, educators and researchers.



From our first workshop. @ The Norwegian Center for Holocaust and Minority Studies.



Was it successful?

All around, the experiment was a success:

- We succeeded in creating a space that stimulated engagement and participation.
- We succeeded in including almost everyone through playful methods.
- Management acknowledged and appreciated the format and outcome of the workshops.
- Most participants found it a positive, fun and inspiring experience!

However, despite the ambition to include the views of everyone, some colleagues in marketing, front desk and maintenance found it difficult to contribute as much as they wanted to during the workshop.

What did you learn?

We learned that our organisation needed a space for cross-department meetings. Instigating such meetings by trying to establish a common ground proved to have a great value. To meet on equal terms through a shared experience reduces friction. Therefore, an inspirational encounter with an external party was essential. In our effort to include all colleagues we did experience challenges in making everyone feel included and valued. We learned that tasks and questions should be specific and to the point, making it clear that all types of competences and inputs are valued. Everyone should feel included in the task and it should be obvious what we want them to do and why we ask them to engage in the conversation. Furthermore, we learned that written feedback is essential. Not everyone is comfortable with speaking publicly and voicing honest opinions in front of management and colleagues. Therefore, we concluded the workshop with so-called "exit notes" asking all our colleagues to express their opinions at the end of the day. These "exit notes" often differed from the opinions expressed during the workshops.

What surprised you?

Before the first workshop took place, we were quite nervous. Management and several colleagues were skeptical. It seemed like the word "democratic" was unpopular. However, during the workshop, skepticism and animosity transformed into engagement! We believe we aroused an appetite for coming together cross-departmentally in a space that combined thematic, social and professional development. The methods we used were playful, allowing participants who work within extremely complicated and emotionally charged fields to collaborate spontaneously and creatively.

What methods or tools did you use?

We were inspired by [this method to encourage reflection and mutual understanding of different perspectives](#) developed by [Dembra](#).

What other resources did you use?

The museums we visited were:

- [Norwegian Museum of Science and Technology](#)
 - [The Nobel Peace Center](#)
 - [Eidsvoll 1814 \(Constitution Museum and Democracy Center\)](#)
-



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Experiment Recap: Royal Albert Memorial Museum and Art Gallery

Improving digital stories through visitor inputs

by Rick Lawrence, Digital Media Officer, *Royal Albert Memorial Museum and Art Gallery*

In connection to **the GIFT Action Research**, we tested if and how visitors will engage with digital stories inspired by objects, collections and donors. We were surprised about their interest in donors – an interesting finding that we can use to improve our digital stories.



Miss Linter, one of our donors. @ Royal Albert Memorial Museum & Art Gallery.

What did you want to find out?

We wanted to find out if visitors will engage with digital stories inspired by objects, collections and donors.

What did you do?

We mocked up an interactive in PowerPoint based on our donor Miss Linter and her mollusc collection. Then asked visitors to give us feedback on what looked interesting and what interested them most. We also used Twitter polls to ask questions about what visitors want to know about donors and what puts them off digital interactives.

Was it successful?

Yes, we got useful feedback both from interviewing visitors and from the Twitter polls.

What did you learn?

That visitors really like to start with the donors and learn about them before moving onto the collection. Good, engaging content is what visitors desire. And working digital interactives that are simple to use and clear in what they do.



One of our Twitter polls. @ Royal Albert Memorial Museum & Art Gallery.

What surprised you?

We started with the basics of what people want from interactives. We were surprised by Twitter responses that indicated most interest in the donor. With much more material about the collections we anticipated that being the focus. The in gallery interviews supported the donor as the entry point to finding out more and, after the Twitter polls, this was less surprising.

What methods or tools did you use?

We used a mocked up interactive in PowerPoint to let visitors choose what interested them. We used Twitter polls to capture data and also recorded any comments in replies to the poll tweets.

What other resources did you use?

Ideally we would have had an interactive set up in a gallery to observe visitor use but time and staffing prevented that happening.



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Experiment Recap: CAOS centro arti opificio siri

Letting teens take over the museum

by Chiara Organtini, Curator, *CAOS centro arti opificio siri*

In connection to **the GIFT Action Research**, we experimented with letting teens take over our spaces, collections, activities and digital channels. We collaborated with **Mammalian Diving Reflex**, adapting their practices of social acupuncture and their Teentalitarianism Project to our museum. The teens learned a lot from the experience as did we – about their attitudes, vocabulary, behaviours and motivations that we seek to embrace more in the future.

What did you want to find out?

We wanted to find out how CAOS was perceived by teenagers aged 14 to 18 and reflect on how we can reconfigure our spaces and activities to engage with them in a process of shared control – to open and democratise the institution by questioning the meaning of authority in terms of who provides knowledge. This experiment was also a way to develop new attitudes and vocabulary to map and embrace audience behaviours and motivations.

What did you do?

We invited 35 teens aged 13 to 18 to take over the museum for a period of one month. First, we invited them to explore the space and collection and staff shared their visions and impressions. Second, we gave them – symbolically – the keys, and thereby the freedom to reconfigure spaces, rules and programs within the given timeframe. They created new captions, new staff roles (such as an urban curator and a young board) and activities (such as selfie workshops for audiences, go scream challenges, digital storytelling sessions and night walks in the city to connect the cityscape and emotional memories with the museum collections). They planned a public event inviting current management and staff to sign a contract to commit to the teens requests after an intense two-hour negotiation. They claimed a part of the gallery to make a comic room – a new space focused on comic culture in a wide sense reshaping the setting of the space as well. They are now working on the creation of a teenage room.

Was it successful?

Yes, it was successful. For the teens as a way to increase their knowledge and above all their capacity to engage with each other, collaborate, lead a process, ideate and project manage a cultural institution. They changed their attitude towards diversity and engaged with adults and authorities in a more mature way. For the CAOS staff,



Teens taking over. @ CAOS centro arti opificio siri.

the experiment established a new bond and sense of belonging. We found new allies in caring for the space, new perspectives on current practices and consolidated patterns and assumptions. We developed new mediation tools, acknowledging differences and embracing new channels that fill the gap sometimes connected with contemporary art

What did you learn?

We discovered that youngsters read CAOS as an institutional space way more than we thought. However, inside the space, they appreciate the absence of rules and instructions. We sense the need for a more diverse narrative, which implies a reworking of information offline and online. We discovered that the lack of diversity in our staff is preventing us from connecting deeply with teenagers. And that there is a need for a follow-up after engaging in a take-over event.

What surprised you?

The level of commitment to the event and the mature attitudes in addressing management and authorities. The internal connection within the team was natural. We were also surprised by how the setting (especially CAOS colors and front desk) was a barrier to youngsters, while outdoor hidden spaces and background noises (due to venue's activities as rehearsal or movie projection) were appealing to them. We also gave them ownership of our digital channels and were surprised by the data analysis that followed (increased number of followers, interactions, visualisations and comments). Finally, we realised how the lack or under representation of the comic culture within the space was a gap and a weakness affecting not only attendance flows but also the reputation of the space among new generations, often preferring bookshops or the library.

What methods or tools did you use?

We often adopt world café and open space technologies when we seek to co-create activities and let the collective intelligence emerge.

What other resources did you use?

We led the experiment with the guidance of an artistic collective **Mammalian Diving Reflex** who has developed a theory and a set of practices defined as 'social acupuncture'. These are creative projects that create unusual conditions, subverting ordinary rules and social systems.



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Experiment Recap: Derby Museums #2

Stepping outside to engage non-visitors

by Daniel Martin, Head of Curatorship and Curator of Making, *Derby Museums*

In Derby, we have different communities of first and second generation immigrants. As part of [the GIFT Action Research](#), we wanted to meet these communities and try to see how they might engage with the museum. We did get a number of new engagements but ultimately there were fundamental issues with the experiment.

What did you want to find out?

Whether there was an appetite within first or second generation immigrant communities to engage with the museum. Also, we wanted to prototype how to best facilitate contributions from these people into the museum narrative.

What did you do?

We used an existing project ([The Derby Story](#)) and the [Museum of Making](#) interpretation plan to:

- host a conversation café at the Museum.
- go into parts of the city where these people live with response cards and to engage in conversation. Each with the question: "What does it mean to live and work in Derby?"

Was it successful?

Somewhat. We were able to build successfully on existing relationships that had been formed through our recent 'World Cultures' gallery. We did get a number of new engagements but ultimately there were fundamental issues with the experiment. Firstly, the Derby Story project lost political will and so the project ceased to be a priority for the organisation. Secondly, we'd termed and grouped the individuals as 'emerging communities' which had the effect of creating informal communities where they do not exist in real life.

What did you learn?

We learned that:

- creating communities serves museum KPIs but doesn't represent impact or reality on the ground.
- it is better to allow access at an individual level rather than group level when levelling access to digital.
- the museum has a very limited presence despite repeated efforts



Image from Derby Museums Trust.

to reach outside of our walls.

What surprised you?

To a degree, the lack of take-up overall.

What methods or tools did you use?

Derby Museums' **Human Centred Design Handbook**.



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Reflection Piece: The Norwegian Center for Holocaust and Minority Studies

Playfulness as a strategy in a center for Holocaust and Minority Studies

by *Elise Grimsrud Christensen, Educator, and Hanne Steien, Exhibition Designer, [The Norwegian Center for Holocaust and Minority Studies](#)*

As a participant in [the GIFT Action Research](#), The Norwegian Center for Holocaust and Minority Studies was challenged to conduct experiments exploring how new concepts and ways of thinking might help our center develop organisationally. One of these concepts was "playfulness". In the following we will share some of our reflections on how we approached the concept, how we came to understand it and how we used it within our institutional framework.

Playful is not a word easily applied to the Holocaust. It does not resonate very well with our fields of research, educational programs or exhibitions. In addition to the wider subject of anti-Semitism and Holocaust in Europe, the genocide of Norwegian Jews and Norwegian Romas, our center also researches other genocides as well as studies of racism and the plight of minorities in contemporary Norway. Both expectations internally and externally to what a Holocaust center should be, made it a challenge to approach playfulness as a concept. In dealing with highly complex, emotionally charged and sensitive subjects, the center has often chosen a considerate, research-based approach rather than a playful one. Experimenting with a change of approach was challenging – can a Holocaust center allow itself to be entertaining? Will that be consistent with our goals? Are we still being respectful? These were some of the questions and concerns we had as we started our experiments.

Searching for playfulness in existing practices

Looking more closely at our exhibitions and engagement with our audiences we did however discover existing practices that mirrored forms of playfulness. Applying the concept to activities rather than to the content of our research, educational programs and exhibitions, we found that even a Holocaust center could hold traces of play. Already, our educators use pedagogical and didactical methods that encourage the students to investigate, create and play with ideas when they come to the museum. One of our programs is called "Create your own exhibition". Here the students photograph historical objects in our permanent Holocaust exhibition in order to create their own. This method invites the students to be a curator and choose their own elements to create a story of the Holocaust. They are encouraged to play with ideas, and explore and debate how their chosen sources include certain things while excluding others.



@ The Norwegian Center for Holocaust and Minority Studies.

Another school program asks the students to act as historians. They are given a set of primary sources (replicas) and, as a detective/historian, they must piece together the fragments of the past into a narrative about a person or a family who experienced the Holocaust. The main purpose with these educational programs is to invite students to use their creativity and critical thinking in order to solve tasks. The students are also encouraged to play with different genres in presenting stories from the Holocaust, such as podcasts, comics and creating leaflets. Essentially, we chose to understand playfulness as closely aligned with activating our audience. We chose to apply the concept on existing methods that challenge the audience to practice historical consciousness, always bearing in mind that it is through the present we understand the past and create our understanding of history.

By raising awareness about playfulness in our organisation, we found that it helped us approach our fields of research and education with new perspectives. Playfulness was not irrelevant for our institution – it was already there! This awareness unlocked new doors to how we present and communicate both with our visitors and within the organisation itself.

Organisational experiment

As part of **the GIFT Action Research**, we also did an experiment that looked into the possibilities within our organisation to **develop a more open and democratic culture for planning and creating new temporary exhibitions**. The center has started the process of building an extension, creating space for exhibitions specifically dealing with contemporary issues and minority studies. For many, this building signifies a new period for the center: How might we build a more democratic, open and inclusive culture?

Bearing the concept of playfulness in mind, we created a series of workshops for the entire staff to participate in. Our aim was to create a better environment for cross-departmental collaboration. To make sure that all employees could participate, it became central to develop playful strategies that could appeal to all of our colleagues, creating a positive attitude to more cooperation and excitement for the centers extension and new exhibition spaces.

The concept of playfulness was at the core when the working group at the museum started to create methods and tasks for our workshop. We wanted to play with boundaries and norms, both institutional and within our fields of research. The group assignments we chose were playful, challenging the participants to discuss different perspectives that could influence the results of the task. We believe the methods called for different types of perspectives and competences: e.g. for researchers to acknowledge and include the insights of the receptionists, the educators to listen to the PR-department and the management to be more aware of how an open and inclusive process can inspire enthusiasm and creativity.

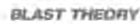
How did the concept of playfulness contribute to our work?

The methods we developed and the workshops that we organised have been successful in many ways. The playful methods and the inclusive form have created more excitement and cross-departmental cooperation. The concept of playfulness was in many ways new to our

organisation, although it existed already in the way we engaged students and schools classes. By exploring the concept and consciously applying it to our work on developing our organisation, it allowed us to combine a respectful approach with playful methods to charged subject matters. Playfulness thus added a new dimension to our work. In our experiment the concept helped us develop methods that inspired an inclusive, engaging and enthusiastic outlook as we expand.



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Reflection Piece: SFMOMA

How can we 'love' museums into the future? Reflections on being a bold and innovative museum

by Dia Felix, Senior Content Producer, [SFMOMA](#)

With SFMOMA's new strategic plan, I don't think it's an exaggeration to say that we have institutionalised what many SFMOMA workers, and U.S. cultural workers in general, have always desired but thought was out of our grasp—a constellation of shared values, a mission statement which is made of adjectives: empathic, passionate, inclusive, brave. I contrast this with the more traditional verb-filled mandate: collect, preserve, study, exhibit. What does it mean to be guided by adjectives? Where are we going?

My boss Chad Coerver likes to say that he is afflicted with "perverse optimism" and this strategic plan is an example of that, to me. But, is it really a plan? Is an aspirational set of values a plan, or a precursor to a plan? And how does it become a plan? And how patient should we be?

I think of the act of radical trust/perverse optimism inherent to the very thing of having a museum. In the US, there is almost no unbranded space. The public spaces of San Francisco are also zones of class combat and frisson, also public toilets and theaters of self-destruction. The totally insane becomes normal, people are necessarily disconnected and even dissociated. The museum on the other hand is another kind of place. We trust people to be respectful toward the priceless work. People speak of a peaceful feeling, of a "favourite place." Others speak of not feeling like they belong here, not feeling like it is for them. In interpretive media, where I produced audio guides, I work to avoid the traditional top-down paternalistic tone. Instead of the fatherly museum director, we ask acrobats, priestesses, artists, writers and comedians to talk about the art they love. Through the stripped-down, unhip AR of the audio guide, we aim to reach people. To say, this is yours too.

Radical trust—we don't check bags. We trust our visitors to behave respectfully. Until recently, the Metropolitan Museum of Art, which does check bags, let anyone into its great doors, its Great Hall, for any amount of money, even one dollar or less, so they could be in a single building which holds 5000 years of human achievement. *This is yours too.*

How does digital content or design play into this? By not acting alone. By not being romanced with itself—instead of what it is/what does it do, ask, what does it do *for people*? And holding each other to being honest.



Night of ideas. @ SFMOMA.

We know the world we want to see. Maybe not exactly, but enough. We want local people to feel comfortable here. We want to explode open the canon. (Okay, we want to at least expand the canon.) We want to bring the stories to the ground floor, despite the cloud-like nature of our spacious, light filled new building. How do we do it? Our education and public knowledge department has skin in the game and boots on the ground every day. Our frontline staff soothes visitors irate for various reasons—they bought a ticket to MoMA in New York, for example, and would like free entry. In my role as Senior Content Producer, I think about a cloud of doors which can connect visitors with varied tastes and varied learning styles with artworks on view. I ask myself: Is it generous? Is it excellent? Is it interpretive? I aim to fulfill this basic trinity, a three-part north star. I think of open windows.

In the Night of Ideas, an evening-long program produced by SFMOMA's education and public programs team in collaboration with the French consulate and the public library, a very diverse group of thinkers got together to imagine the city of the future. Dancers in white activated the dark stacks. Other dancers, hanging by ropes that I really hoped were strong, scaled the atrium. Young poets spoke fiercely of their disappearing neighbourhoods, and a drag queen sang her heart out with a giant hat which supported a glittering model of the city of San Francisco. Panel after panel told the truth. Donuts and cocktails were sold in the landing area outside the children's room. I am sure more than one pair fell in love. Late in the night, waiting endlessly for my car like everyone else, I watched a patient security guard remind the French attendees, one after another, that smoking is not allowed in the library entrance. It was one of the least tech-centric convenings I had witnessed in memory, it was all about being together in a singular time and space.



Night of Ideas. @ SFMOMA.

I researched this event for **the GIFT Action Research**, considering the question: How might we create a bold and open culture in museums, including an acknowledgement that failure is a part of innovation? I asked colleagues in education, who had produced the event and were deeply involved to reflect. Among the generous thoughts they shared were the following:

- It was wonderful to see so many people joyfully participating in critical ideas... I think it's a very good example of the power and importance of civic discourse. I also would add a note about the importance of art and an art museum not only for our logistical support/expertise but also as a convener of people and ideas that are crucial to our time and public life. It's an expansive view of what a museum is/can/should be that we've believed for quite some time, but I could see how this event could nudge that forward with the more skeptical out there. – colleague in education
- Internal and external collaboration is crucial, and requires more

time, listening and sensitivity than many think there is time for. And yet, if that bold and open culture is to be created, failures included (which are just stepping stones on the way to success), then we must take the time, listen, and be sensitive and responsive. – colleague in curatorial



Night of Ideas. @ SFMOMA.

Museums are imperfect and “problematic” but they are also sites of literal transformation and connection. And just as they were formed by Eurocentric, singular and supreme histories and the energy of empire, so they can be reformed by those of us who would like to imagine another future, or who must. Passionate! Empathetic! Brave! Inclusive!

“Sounds great, let’s do it!” was the general staff reaction that I witnessed to the announcement of the strategic plans after years of development. (We do it every five years). It has been actualized in one small case in the form of a de-accession of a lesser-known 1960 Rothko, explicitly to “broadly diversify” our collection.

As an interpretive media producer who seeks to foster connection between visitor and work of art, there is always a challenge in being part of a supreme narrative—how do we operate outside of this authentically, without tokenising? The attempts can sometimes feel like we’ve caught a case of amnesia, or like we are inviting outsider voices as special guests, while still running the house. What does it mean—how does it actually happen—to dream far outside of what is currently within reach? Sounds great, let’s do it. How?

But back to the role of digital media in the present and future of museums and cultural heritage. Rather than see digital growth as metonymic for truly progressive, the more progressive thing is to take an honest stock of what digital-centric experience does for people and consider if it’s a direction that is meaningful or desirable. If that is still our dream.

Having worked in museums for 20 years, I have seen a great change from the promise of digital in museums to the more crucial promise of museum space as a respite from technology-centered living, from a kind of counterfeit togetherness into a literal one. A necessarily social and sensory space. How can we be brave? How can we be early adaptors of a more vital way of living, not just the latest gadget that ALMOST works, that WOULD work if only you knew how to use it, if only the startup that we were partnering with didn’t just get acquired, if only the genius dude who made it hadn’t JUST left for a better opportunity in the private sector?

Gestures are not enough, yet gestures are not necessarily empty either—at the Oakland Museum of California, for example, not all wall text is in all three languages, but visitors are welcomed in three Bay Area languages and they are in general appreciative of this, even if they read English fine. This reminds me that small or symbolic gestures are

not necessarily empty ones. One has to start.

Digital culture is both invigorating and destructive in terms of what is happening in this beautiful and beloved city, this instant city, this gold rush city always which rolls a seismic gamble with each perfect pacific sunset. How can we be decent now? How to live in reality and dream towards something else?

A truly bold and innovative culture begins by asking: what kind of world are we working towards, and is backed up by honest relationships and deep conviviality. SFMOMA, and museums and art spaces more broadly, are places to dream together.

How can we love museums into the future? Call me and tell me.



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About

The GIFT Box is a result of the GIFT project – a research project funded by the EU's Horizon 2020 research programme. The project brings together internationally renowned artists, designers, museum professionals and researchers to help museums create hybrid experiences: Experiences that combine the physical and digital to create personal encounters with cultural heritage. The project started in January 2017 and runs for three years, to December 2019.

Read our [academic publications](#) and see how we have been covered [in the media](#). If you have questions, please contact us on gift@itu.dk.

Who we are and what we do

presented by [Europeana](#)

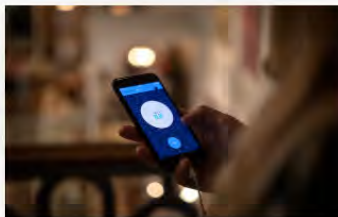


Tools and ways of working

Helping museums make richer digital experiences for their visitors

The team behind the GIFT project are proud to launch the GIFT Box: a toolbox of resources to help you design, plan and implement enhanced visitor experiences. Check out some of the creative ways it can be used.

[Learn More ...](#)



Thinking about the experience first

Giving visitors the tools for deeper engagement

We present you with some of the exciting developments coming out of the project, starting with an introduction from the Principle Investigator, Anders Sundnes Løvlie.

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Blending the physical and digital

Using Artcodes to create monuments for a departed future

Karin Ryding from IT University Copenhagen introduces you to one of our tools: Artcodes – customisable scannable markers that allow you to blend your physical exhibition with digital content.

[Learn More ...](#)





Working with museums

Museums of the future tap into the GIFT app

Brighton Museum has spent three years working with GIFT project partners Blast Theory, helping to test the GIFT web app in a live museum setting. In this article Digital Manager Kevin Bacon shares his perspective on GIFT and museums of the future.

[Learn More ...](#)

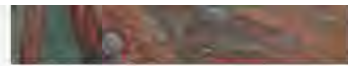


Meaningful personalised experiences

Introducing personal objects to the museum space through 'Your Stories'

Paulina Rajkowska, lecturer at Uppsala University in the Department of Informatics and Media, shares her experience working on Your Stories, a museum experience that introduces personal objects into museum spaces.

[Learn More ...](#)



Tapping in to our emotions

Give and take in the museum experience

Bogdan Spanjevic is the General Manager of NextGame, a Belgrade-based company specialising in playful projects and digital advertising. Bogdan talks with us about how appropriation models have been tested, adapted and played with as part of GIFT.

[Learn More ...](#)

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Brighton Museum

Centro Arti Opificio Siri

Danish Museum of
Technology

Art
Denmark

UK

Italy

Science and Technology
Denmark



Museum of Making
UK



The Munch Museum
Norway



The Norwegian Center for
Holocaust and Minority
Studies
Norway



Royal Albert Memorial
Museum & Art Gallery
UK



San Francisco Museum of
Modern Art
USA



Tyne & Wear Archives &
Museums
UK

Framework Partners



LABoral Centro de Arte y
Creación
Spain



The National Museum of
Serbia
Serbia



Royal Shakespeare
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UK



University of Nottingham
Museum of Archaeology
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Academic Publications

Academic publications from the GIFT project

All academic publications based on research in the GIFT Project will be made available via open access and posted on this site.



Research Publications

2019

Darzentas, D., Velt, R., Wetzell, R., Craigon, P. J., Wagner, H. G., Urquhart, L. D., & Benford, S. (2019). Card Mapper: Enabling Data-Driven Reflections on Ideation Cards. *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*, 571:1–571:15. <https://doi.org/10.1145/3290605.3300801>

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The GIFT Box is a result of **the GIFT Project** – a research project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727040. If you have questions, please contact us on gift@itu.dk. The GIFT Box WordPress theme is **open source** and licensed under the terms of **the MIT license**.

Press Release

The GIFT Box: Helping museums create richer digital experiences for their visitors

The team behind the GIFT project are proud to launch [the GIFT Box](#), a set of free, open-source tools and ways of working to help museums offer richer digital experiences for their visitors.

Aimed at cultural heritage professionals, academics, students and those who work in the creative industries, The GIFT Box provides a variety of innovative tools for designing, planning, and implementing experiences that combine the digital and physical.

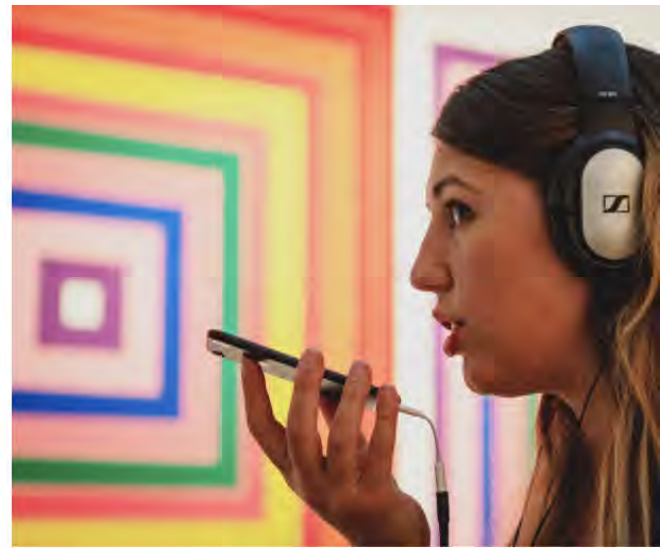
For those already thinking about creating a digital visitor experience, the design and planning tools offer a way to generate, strengthen and test ideas. They have been developed with and for museums, and include engaging and innovative exercises like the VisitorBox Ideation Cards, a printable card game that helps drive the development of ideas for digital experiences.

The GIFT Box also contains digital tools which provide the practical resources and inspiration for creating digital experiences in a physical collection. The Gift App encourages visitors to use their smartphone to create a digital gift for someone they care about, while Never Let Me Go encourages two visitors to curate each others' encounter with a collection. The Gift Wrapper, meanwhile, is an app that visitors can download to make a museum gift more personal by adding a link to content such as music, photos or videos.

Finally, the GIFT team has worked with 10 prominent museums from Europe and the US – including the Munch Museum in Norway and the San Francisco Museum of Modern Art – to develop practical ways of working to inspire individuals and institutions to think creatively about their collections and work differently.

For anyone looking to create engaging experiences for their visitors, see examples of how the latest research can inform the cultural heritage sector, or find inspiration on digital design processes, the GIFT Box is an indispensable tool. Even better, all of the tools are free and can be easily accessed through the GIFT Project website.

Anders Sundnes Løvlie, Co-ordinator of the GIFT Project, IT University of Copenhagen, says, 'Our aim has been to support museums in creating nuanced and personal experiences, where the experience is more important than the technology. We call these hybrid experiences, because we are interested in using the digital to enhance the experience of the physical museum exhibition. So instead of using virtual reality headsets which shut people inside a digital world, we



are using mixed reality technologies.'

Kevin Bacon, Digital Manager at the Brighton Museum – who have made use of the [GIFT App](#) in their collection – says, 'The beauty of GIFT is that it gives you a new pathway through the museum, one that takes you off the beaten track onto a pathway of your own.'

About the GIFT Project

The GIFT project is a Horizon 2020 funded research project which aims to help museums overcome some of the challenges involved in using digital technology to facilitate engaging visitor experiences. The project brings together internationally renowned artists, designers, museum professionals and researchers to help museums create hybrid experiences; experiences that combine the physical and digital to create personal encounters with cultural heritage.

The project includes partners from [IT University of Copenhagen](#), [The University of Nottingham](#), [Uppsala University](#), [Blast Theory](#), [NextGame](#), [Culture24](#) and [Europeana Foundation](#). More information about the project is available on the [GIFT project website](#), and through the [GIFT project series](#) published on Europeana Pro in summer 2019.

Contact

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- The GIFT project via email at gift@itu.dk
- Anders Sundnes Løvlie, Co-ordinator of the GIFT Project, IT University of Copenhagen at asun@itu.dk

To receive a downloadable press pack please contact:

- Nicholas Jarrett, Marketing Manager, Europeana Foundation at nicholas.jarrett@europeana.eu



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The GIFT Box Europeana News, 6th November 2019.

Give and take in the museum experience Europeana News, 19th August 2019.

Introducing personal objects to the museum space through 'Your Stories' Europeana News, 14th August 2019.

Museums of the future tap into the GIFT app Europeana News, 29th July 2019.

Using Artcodes to create monuments for a departed future Europeana News, 22nd July 2019.

Give visitors the tools for deeper engagement Europeana News, 17th July 2019.

Kunstnere bruger augmented reality DR1 TV AVISEN med Sporten, 16th May 2018 (Danish).

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Digital innovation can enhance cultural heritage, hears conference Horizon, 21st April 2018.

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Project Reports

Project reports from the GIFT project

All public reports are published by the European Commission on [CORDIS](#). Please also see our [academic publications](#).



Documents, reports

Design of the Beta Toolbox. A report giving the overall design, requirements and specification of the Beta Toolbox.

Report on Study of Intimate Gifting Experiences.

Communication Strategy. The communication strategy outlines a plan for communicating the project activities and outcomes to the public.

Evaluation Strategy and Change Process Report. A report describing the evaluation strategy, summarising key factors that will be measured against, identifying members of the core evaluation group (beneficiaries) and the Lead User Panel, and detailing the process to be followed to capture data.

Open Research Data Pilot

Data Management Plan.

Websites, patent filings, videos etc.

Project Website. The GIFT website will host all relevant information about the project, the consortium as well as all major developments and outputs resulting from the project. Project reports and research articles will also be made publicly available on the website.

Demonstrators, pilots, prototypes

Prototype: Intimate Gifting Experiences.



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MW19 | Boston

Boston, Massachusetts, USA, April 2-6, 2019

The GIFT Framework: Give Visitors the Tools to Tell Their Own Stories

Anders Sundnes Løvlie, IT University of Copenhagen, Denmark, Steve Benford, University of Nottingham, UK, Jocelyn Spence, Mixed Reality Lab, University of Nottingham, UK, Timothy Wray, IT University of Copenhagen, Denmark, Christian Hviid Mortensen, IT University of Copenhagen, Denmark, Anne Olesen, IT University of Copenhagen, Denmark, Linda Rogberg, IT University of Copenhagen, Denmark, Ben Bedwell, University of Nottingham, UK, Dimitrios Darzentas, University of Nottingham, UK, Annika Waern, Informatics and Media, Sweden

Abstract

GIFT is an ongoing EU-funded research project developing hybrid visitor experiences: mixed reality designs that complement, challenge, or overlay physical visits with digital content. Through design exploration of two concepts focusing on gifting and play, the project has developed a design framework and toolbox aimed at helping museums create deeper and more meaningful experiences by giving visitors the tools to tell their own stories. This framework is now being made freely available as an "open beta" for museum professionals and other users. The project is highly cross-disciplinary, combining human-computer interaction research, artist-led

exploration, technology explorations, and experience design in collaboration with museums. Furthermore, the project gathers 10 prominent museums from Europe and the U.S. in an action research project that both serves to ground the framework in the needs of museums while also facilitating the museum partners' need to become "digital-ready," understanding and capitalising on digital technology.

Keywords: Experience design, gifting, play, hybrid experiences, artist-led research

Introduction

Using new technologies to facilitate meaningful and engaging visitor experiences is a complicated proposition. The pitfalls are many: Technologies may fail, they may require too much resources or upkeep, the completed designs may not do quite what was initially promised, designs may fail to meet the complex and sometimes conflicting demands of curators, marketers, educators and IT departments—or they may simply fail to engage visitors. In other words, developing technologically mediated visitor experiences is a wicked problem of the kind that designers specialise in solving by gathering contributions from multiple stakeholders and prioritising human experience over technological paradigms. However, far too often this problem is approached by putting technology first, and engineering systems and apps that often do not end up meeting the actual needs of museums or visitors.

The GIFT project addresses this problem by offering an experience design framework stemming from an ongoing, cross-disciplinary research project involving artists, designers, curators, museum educators, computer scientists and 14 museums in Europe and the U.S. The framework aims to facilitate in-house, practitioner-led design of hybrid and interpersonal experiences, in which mixed reality technologies are used to augment or expand the experience of a visitor in the museum, and in which visitors use these technologies to share their experience with their “strong-tie”

connections (family and loved ones). As such, the framework facilitates sharing in a much narrower and more intimate sense than the larger-scale sharing which is typically facilitated through regular social media such as Facebook or Instagram. The GIFT research project has explored the largely untapped potential for visitor activities based on strong-tie connections through concepts such as gifting and play. Further, we suggest that “hybridity” provides a way of distributing agency between the museum institution and its users, thereby establishing a more balanced relationship with regard to aspects of power and control over experiences within museums and related to museum collections.

The resulting framework is offered freely under an open source license and is intended to be usable by a single museum professional with few resources. In 2019, the framework is still under development and is offered at the website gifting.digital (<http://gifting.digital/>) as an “open beta,” in order to gather input and feedback from external users.

In this paper, we will first explain what we mean by hybrid experiences, including the two particular approaches we have explored in the project: gifting and playful appropriation. Then, we will account for our practical approach, how the trajectory of the research and development work was informed by our museum partners and, thus, grounded in the needs of real museum professionals. Thereafter, we will provide an overview of the framework. Finally, we end the paper with a reflective discussion of some of the challenges with developing hybrid museum experiences that we have encountered in the project.

Theoretical Perspective—The Hybrid Museum

We are interested in the idea of museum visits as being hybrid experiences, by which we mean how physical and digital assets can be combined to deliver new kinds of composite visitor experiences (Bannon, Benford, Bowers, & Heath, 2005; Jaén, Bosch, Esteve, & Mocholí, 2005; Pujol et al., 2012). Physical-digital hybridity is a familiar concept from the “technical literature,” underpinning the technologically oriented paradigms of mixed reality in which physical and virtual worlds are combined to create different forms of immersive experience (including both virtual and augmented reality) (Milgram & Kishino, 1994), locative experiences that appear to attach digital assets to physical places (Farman, 2013), and the Internet of Things that embeds digital interactivity in physical artefacts (Atzori, Iera, & Morabito, 2010). Museums might turn to this technical notion of hybridity to meet several pressing goals including providing more personalised interpretations, enabling visitors to contribute their own stories, or more generally as a way of reaching out to technically savvy audiences who respond to or perhaps even expect interactive hybrid experiences.

One popular approach to hybridity is that of *layering* in which digital assets appear to be overlaid onto a physical setting, in our case onto a museum and its exhibits, as employed by both locative media and augmented reality. Our particular perspective in this project is to explore how the creation and ownership of layers can be distributed between the museum and its visitors. We envisage hybrid museum experiences in which multiple digital layers become overlaid onto the physical museum and in which these not only reflect the voice of the museum but also represent interpretations made by visitors—for their own purposes and also intended for other visitors. The GIFT project is exploring two specific approaches to this:

- *Gifting*—in which visitors create personalised tours for other visitors as gifts. Gifting is a powerful social practice across many cultures that underpins social bonds, demands effort and personalisation on behalf of another, requires the meaningful selection of artefacts, and may encourage a level of reciprocity as part of a social transaction (Gouldner, 1960). Gifting has the power to realign, develop, or even undo social relationships (Ruth, Otnes, & Brunel, 1999). Museums are already sites for gifting—both in terms of donated collections and funding as well as selling souvenir gift items—but

our question is to what extent visitors can meaningfully virtually gift the actual exhibits to one another. Gifting entails a focus on sharing on an intimate, small scale, which sets our approach apart from other projects which have attempted to facilitate participatory, community-based curation (see e.g. Basso, 2016).

- *Playful appropriation*—in which the museum makes its (digital) assets available for visitors to appropriate them for their own purposes, for example playing games or using them as props in creative exchanges. Appropriation can be a challenging concept for museums, often being associated with colonialism and the appropriation of other’s cultures (Sherman, 1987) or with the appropriation of the gallery itself by the “ruling elite” (Bennett, 2013). However, the technical literature often discusses appropriation as being a positive design goal in which people are able to adapt technologies for their own purposes (Dix, 2007). Our interest here lies in the latter, considering how visitors might themselves appropriate the museum and its exhibits as resources for their own playful purposes and meaning-making.

In both cases we are, of course, interested in how opening up the agency of layering to visitors can also benefit the museum—how it can learn about its visitors and their stories, or help visitors reflect and make their own meaningful interpretations.

Our perspective also extends the notion of the hybrid museum from being a technical idea to a broader notion in which the purpose of the visit is also hybrid, reflecting previous discussions of hybrid museums as being places that combine recreation and learning (Kotler, 2001) and that support a “hybrid economy of meaning” that employs participatory practices to combine both institutional and visitor-generated interpretations (Vestergaard, 2013).

Practical Approach

The GIFT Framework is based on extensive collaboration in a number of smaller sub-projects between university researchers, artists, designers and museum professionals. The project has engaged with museums in three different ways:

1. A handful of museums have been hosts for **pilot cases**, providing real-life laboratories for design work led by artists and designers in the project.
2. A group of 10 museums in Europe and the U.S. have engaged in a structured **action research process** aimed at building their capacity for facilitating hybrid experiences—as well as informing the design and development of the GIFT framework.
3. Finally, a number of **external museum partners** have taken the tools developed by GIFT and applied them in their local context, offering test cases and insights about how the tools work when applied outside the project.

In the following we will give examples of these three approaches.

Pilot Case: Gifting Experiences

One of our main design experiments focuses on the concept of digital gifting (which also gave the name to the main research project), as described in the theory section above. This is an artist-led collaboration between the UK artist group Blast Theory, the Mixed Reality Lab at the University of Nottingham and the Royal Pavilion and Museums in the UK. Based on previous research about gifting of digital museum experiences (Fosh, Benford, Reeves, & Koleva, 2014; Fosh, Lorenz, Benford, & Koleva, 2015), we aim to create a smartphone app through which visitors can make bespoke tours through the museum for a particular friend or loved one. The experience is described by the artists using the metaphor of a “mix tape”: “Ever made a mix tape for someone? How about with objects from a museum?” In terms of designing for a hybrid museum experience, Blast Theory thought of the app as a three-way point of connection among the museum, the visitor, and the visitor’s network of online and real-world

relationships.

The technology of a smartphone app suits hybrid gifting within a museum space. Gifting requires thoughtfulness and effort, though not necessarily financial outlay, in order to have a chance of being well received (Robben & Verhallen, 1994). Gifts also create a greater sense of closeness when they reflect the giver's own personality rather than simply suiting what the receiver would like to own (Aknin & Human, Lauren J., 2015). Even text messages (Taylor & Harper, 2002) and file sharing (Giesler & Pohlmann, 2003; McGee & Skågeby, 2004) can be understood as types of gifts. Blast Theory, therefore, decided to explore an app that makes gifts from photos of museum objects, annotated with the giver's reasons for selecting those objects, plus a clue to find their objects, all "wrapped" in various ways. Receivers could then experience something of the giver's visit, compounded with a sense of personal connection to the giver through their choices and rationales.

The gifting app has undergone multiple iterations, the most recent of which was deployed at Brighton Museum & Art Gallery over three days in July 2018. Over two hundred members of the public used the app, and 114 provided feedback. Givers first decided on a friend or family member to make a gift for. They photographed up to three museum objects and audio-recorded an accompanying explanation, plus a clue, for each object. The gift was completed with a song of the giver's choice. Receivers got an email notification to download the app in order to experience their gift, either in the museum or elsewhere.



Figure 1: The gifting app at Brighton Museum & Art Gallery

Response to the app was an exciting mix of the hoped-for and the unexpected. Givers as well as receivers often felt that they saw the museum “with new eyes” when imagining what their receiver would like, or what their giver had thought they would like. Although no one was asked anything about perspectives or ways of seeing, many spontaneously described their experience in terms such as having “fresh eyes” or having the chance to “think a bit differently” because of the requirement to look for objects that another person would like. Several also mentioned that they felt more attached to the objects they chose, or those chosen for them, simply through the act of gifting using this app. We also found that voice can be much more than a sensible mechanism for keeping visitors from staring at their screens. This app used a voice whose tone and word choice were very informal and personal, an “intimate stranger” that shaped many participants’ engagement with the gifting process and with the museum in ways that Blast Theory had aimed for (although admittedly, a few found it unpleasant). Due to the short duration of the deployment and the fact that many givers

chose to send to distant receivers, only 28 out of our 114 respondents received their gifts within the museum, but their responses reflect these themes. For a more detailed analysis of the design rationale and visitors' responses, see (Spence et al., in press).

The GIFT project includes a handful other pilot cases, conducted in collaboration between the Serbian creative agency NextGame, the Mixed Reality Lab, the IT University of Copenhagen, the Museum of Yugoslavia and the Munch Museum. Some of these cases are described in (Back et al., 2018; Ingimundardottir, Stanciauskaite, Kjul-Sachse, Wray, & Løvlie, 2018; Ryding & Løvlie, 2018).

Building and Sharing Knowledge Through Action Research

In order to ensure that the GIFT framework is relevant and usable for museum organisations, we are running an action research project with participants from 10 museums in Europe and the U.S., in collaboration with Culture24 and based on their research programme, *Let's Get Real* (Malde, 2018). The participants are:

- San Francisco Museum of Modern Art (SFMOMA), USA
- The Munch Museum, Norway
- ARKEN Museum of Modern Art, Denmark
- Royal Albert Memorial Museum & Art Gallery, UK
- Royal Pavilion, United Kingdom
- CAOS Centro Arti Opificio Siri, Italy
- Center for Studies of Holocaust and Religious Minorities, Norway
- Danish Museum of Science & Technology, Denmark
- Derby Silk Mill, UK
- Tyne & Wear Archives & Museums, UK

Action research is a structured form of reflective practice, where a group of practitioners engage in a progressive process of problem solving with iterative cycles of planning, taking action, analysis/evaluation and reflection

(McIntyre, 2008; McTaggart, 1991; Reason & Bradbury, 2008). The participants constitute a community of practice (Wenger, 1998), where they can reflect on commonalities and differences within their work and museum organisation. We used “Theory of Change” as a guiding principle in order to make participants focus on an objective they wished to achieve, rather than developing a specific object or product (Connell & Kubisch, 1998; Taplin & Clark, 2012).

The process was structured around a series of five, two-day workshops where participants worked together as a group, as well as four action-taking phases between the workshops, where the participants worked with a group of colleagues at their home institution. Each institution conducted an experiment with the intention to explore GIFT-relevant concepts such as personalisation, playfulness and visitor engagement, and develop the digital capacity of their institution. The experiments underwent two iterations, with structured reflection and redesign of the experiment in between. In the final phase of the project, which is still ongoing at the time of writing this paper, the participants are challenged to embed learning from the project in their home institutions and distill key insights for their own future work and the museum sector at large.

Research-in-the-wild: Adoption of GIFT Tools by Museums

While GIFT is still an ongoing project, we have already engaged in a number of partnerships with museums outside the project to deploy tools and designs from the project “in the wild,” in order to gather experiences from use in real museum settings and help museums use our designs. Examples of such partnerships include (the tools mentioned are presented in more detail further on):

- **Tate Modern, London (UK):** A collaboration with artist Claire Twomey to use both the Artcodes app and photogrammetry toolchain (see below) to deliver a major public exhibition called *FACTORY*. Throughout the eight days of the exhibition, the app was downloaded and used by 579 visitors in total.
- **The Nenescape project (UK):** An ongoing collaboration with funding from

the UK's Heritage Lottery Fund to use the Artcodes app to deliver a historic visitor experience of the river Nene.

- **The National Videogame Arcade (UK):** A collaboration to use photogrammetry, AR, and VR technologies to create a public mixed reality storytelling exhibition of scanned war-gaming miniatures and other meaningful objects contributed by visitors.
- **National Holocaust Museum (UK):** Using ideation cards to envisage a redesign of the museum and considering use of specific implementation tools.
- **City Arts (UK):** Use of the Lightweight Photogrammetry tool to realise their Armchair Gallery app (<http://city-arts.org.uk/armchair-gallery/>).
- **Nottingham Contemporary, The National Justice Museum (Nottingham) and Chatsworth House (UK):** Using the Artcodes tool to create the “Grand Tour” (<https://www.visit-nottinghamshire.co.uk/whats-on/the-grand-tour-season-three-p639861>) experience that connected visiting experiences between museums.
- **Wollaton Hall Museum of Natural History (UK):** Using the Artcodes tool to create a dinosaurs trail.

At the time of writing we have an ongoing collaboration with the **National Museum of Serbia**, which recently reopened after having been closed for 15 years. Partners in the GIFT project were commissioned by the museum to create *Your Stories*, an exhibition that used the photogrammetry toolchain and the Artcodes app to present artefacts contributed by visitors (Figure 2).

The project invites ordinary citizens to bring objects of significance for their personal stories, to have them 3-D scanned and exhibited virtually in the National Museum. The opportunity to place and exhibit personal objects side-by-side with ancient, historic artifacts or artworks by famous artists like Picasso or Van Gogh, caused much public interest. Our initial social media campaign in which we invited citizens to donate objects reached 360,000 people over the course of two months.

The objects that were virtually “donated” were curated in collaboration with the museum team, resulting in an exhibition of 45 virtual objects. These were paired with relevant objects from the museum collection and connected with hashtags that provided explanations of the connecting principle that was used in each particular case. These hashtags will be printed as a scannable Artcode and posted next to the museum object. When scanned, these hashtags open a page on the National Museum’s website providing information about the virtual object. Those hashtags can, of course, also be used for sharing the experience on social media. The exhibition is due to open in January 2019.

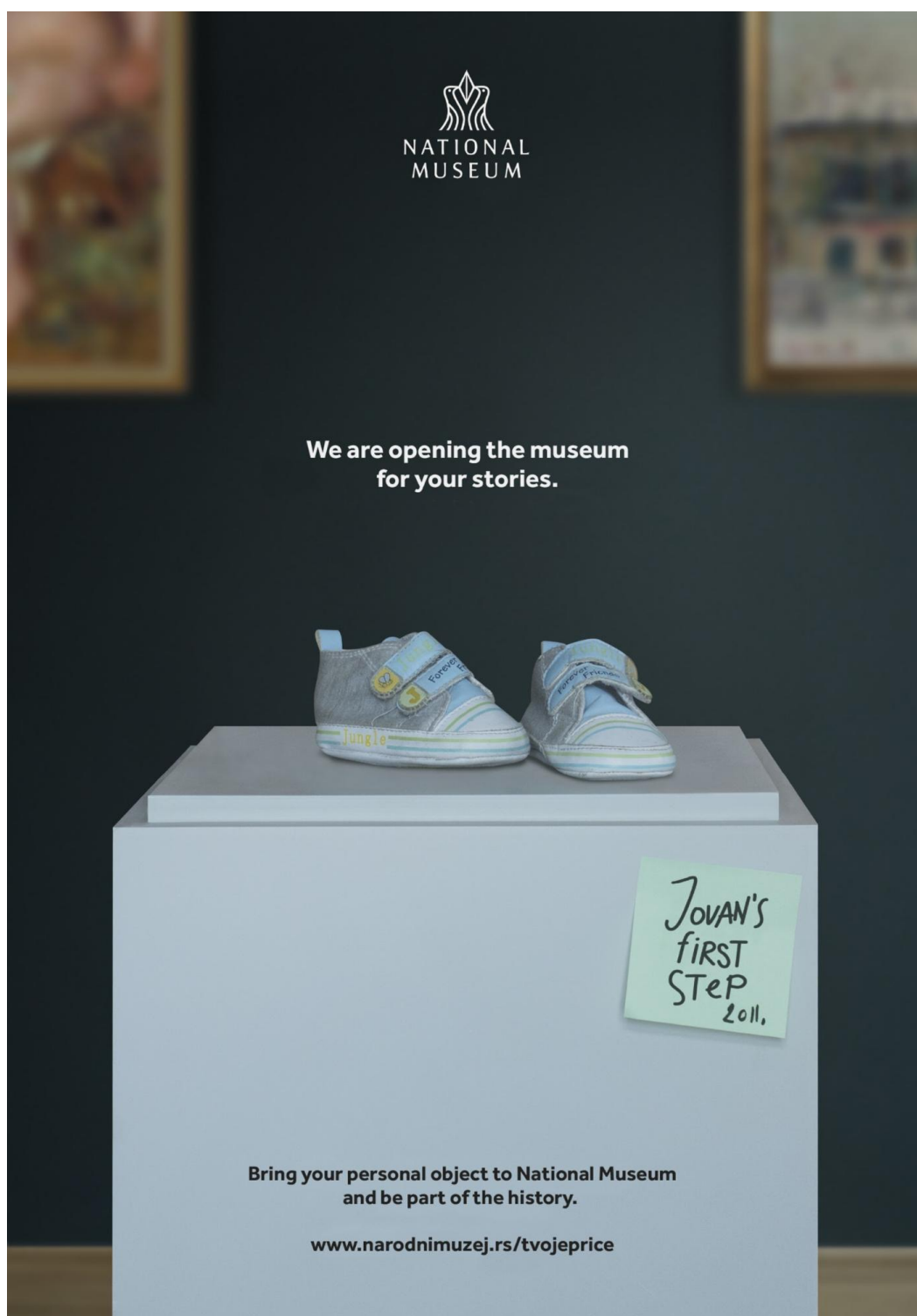


Figure 2: Ad for the “Your Stories” exhibition at the National Museum of Serbia.



Figure 3: “The purse I wore on my wedding day.” Scanned object from the *Your Stories* campaign. (<https://sketchfab.com/models/81091d49482747649a04c5a830c4a44e>)

The GIFT Framework

The GIFT Framework offers a collection of tools, design guidelines, and best practice recommendations extracted from our practical and theoretical

research. The website is aimed at museum professionals, and is intended to be useful and usable for a single professional working in an environment with minimal resources. In order to make this possible, the website has been developed through an iterative user-centered design process in close consultation with the participants in the action research module. Through this process, we have identified the following requirements for the framework:

- Demonstrate that the tools are easily adoptable, and hence, fit into existing museum practices
- Showcase case studies that demonstrate the benefits of the tools in practice
- Demonstrate how the tools can be used to support engagement with the objects and the collection
- Demonstrate how the tools can foster museum-visitor and visitor-visitor interactions. Ideally, the framework should be relationship-oriented rather than tool-oriented.

An open beta version of the framework was published at our website gifting.digital in November 2018 (see Figure 4). In order to realise the above communication goals, each tool is presented in a way that describes why the museum should use the tool, links to case studies and scenarios, and explains how the tool could readily and easily be adopted within the museum. Considerable design work has been done to create a coherent form and tone of voice across a range of diverse sub-projects within the rather large collaborative project.

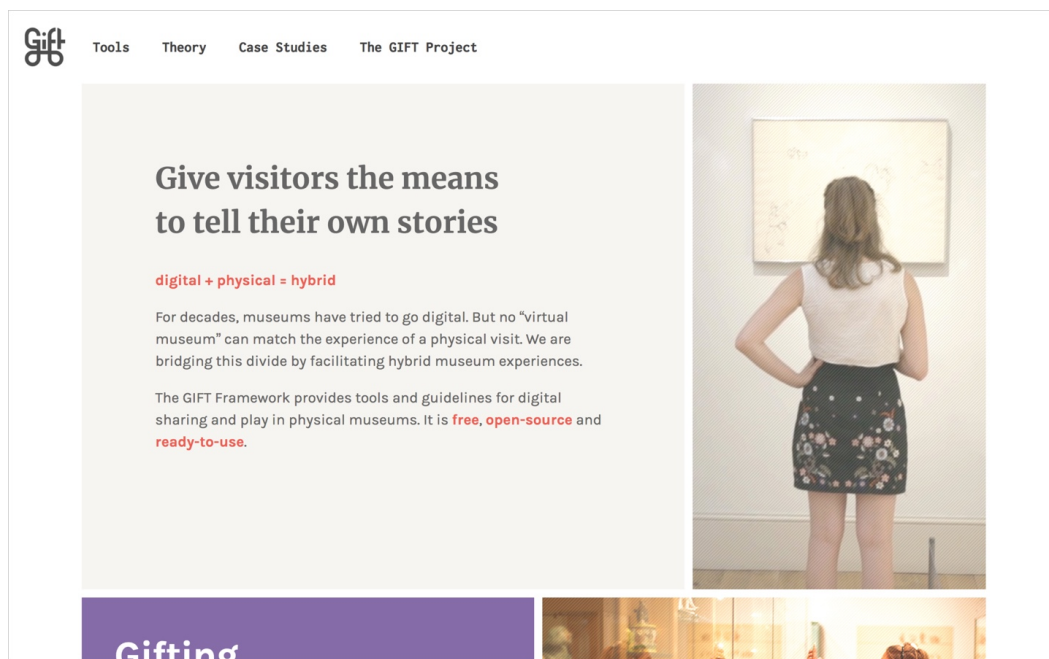


Figure 4: The GIFT Framework website

Gift Exchange App

Let your visitors give a personalised museum experience to someone they care about.

A short title of the project, around 30 characters max.

A brief, catch 'byline' no more than 90 characters. Think of this as a 'newspaper headline' for the tool. **The byline should explain briefly the kind of visitor experience the tool could support, or the immediate benefit of adapting or adopting this tool / process.**

A link to a call to action so that the digital enthusiast can try the tool. We should minimise the amount of steps taken for a user to tangibly try out the tool within the museum.

GET STARTED NOW

The Gift Exchange App lets visitors share museum experiences in a more personal and engaged manner than most social media allow. Visitors assemble objects or places in the museum as an 'experience' to gift to someone they care about. The gift is digitally wrapped and sent to the recipient, who can unwrap and experience the gift then and there, or visit the museum to get the full experience.

Interested? Register with us now and a member of the Gift Project Team will contact you and guide you through the process.

A brief paragraph that explains **how the tool would work** within a museum setting, and if applicable, the **kind of visitor experience** that the tool supports.

What is the experience like?

Some people created playful treasure hunts with a game-like mission to find all the objects, while others spent a great deal of time and care choosing a single object. See how the app has been used by:

[Brighton Museum & Art Gallery](#)
The University of Nottingham

A brief description of the experience of using the tool, based on case studies / user tests. We'll write out this content based on the case studies you give us.

How can we use it?

The Gift Exchange app can be used in your museum without any particular technical resources. All you need to do is register with us and add some placeholder content.

[Learn More ...](#)

A brief description of how a museum could adopt the tool. We'll write out this information based on the 'three steps' you provide us (see below).

Why not social media?

The Gift Exchange app facilitates private sharing between single individuals. Therefore it requires less moderation and control than ordinary social media. The design of the Gift Exchange App is based on well-backed research on:

[Gifting](#)
[Intimate Experiences](#)

A brief description of why this tool should be used, and how it could benefit the museum. This section also links back to the theory that supports the tool.

Visitors who use the Gift Exchange app tend to explore the museum exhibitions carefully, searching for objects that have personal meaning for them and the recipient of the gift. Here's an overview of how it works:

Figure 5: Content guide for the GIFT Framework, used to ensure that the presentation of tools meets the museum users' requirements

Experience Prototyping Tools

An important aim of the GIFT project is to release tools that enable other practitioners and researchers to experiment with our approach and ideas. We envisage these as being “experience prototyping tools” that support the end-to-end prototyping of user experiences— ideally without recourse to deep technical knowledge—to the point where museums and visitors can try

out new ideas. All of the tools are fully functional when used independently, but they share a common technical back end (metadata schema, application programming interface and server implementation) that allows them to exchange and reuse assets when used together. These tools include:

Gift exchange app: The gift exchange experience described above has been generalised into a tool that allows museums and visitors to experiment with making their own gift experiences for potentially any museum. It supports both the giving and receiving of museum visits as gifts. The current version employs audio instructions to guide the gifting experience and facilitate user-generated audio messages and images, and is available through Apple's App store for limited versions of iOS. Future versions will also be available for Android devices. (https://gifting.digital/?page_id=5)

Artcodes: Artcodes is a system for creating visual scannable markers (similar in functionality to QR codes) that can be directly designed and even hand drawn by users by following a set of drawing rules, so that they can take on bespoke and aesthetic forms, e.g. in order to fit the aesthetic of a museum exhibition. The markers can be connected to digital assets, wrapped up as an experience, and shared with others. The assets take the form of web links to external resources. Users can open up others' experiences and appropriate them by mapping them to their own web links, before resharing. Artcodes runs on both iOS and Android. A description of the drawing rules, experience editing and sharing app and a reflection on examples of use can be found in (Benford et al., 2017). (https://gifting.digital/?page_id=41)

Museum ideation cards: This tool is different in nature. Rather than focusing on the prototyping stage of research, it supports ideation—the early stages of generating and developing designs. Ideation cards are by now a familiar design mechanism in many fields (see Golembewski & Selby, 2010). Our deck has been formulated to encapsulate the design and technical knowledge from the project along with further cards that encourage museum designers to consider intended audiences, institutional goals, and constraints. The cards also come with guidance for how to use

them as part of a structured, collaborative ideation process. Furthermore, we are designing a generalised **ideation capture** tool that will capture the results of ideation and design sessions using the ideation cards, and so allow participants to reflect on the variety of theories, concepts, and technologies that they have engaged with and compare their designs with those of others. (https://gifting.digital/?page_id=53)

DIY Photogrammetry: Photogrammetry is already a tried and trusted technique for digitising physical assets. Our contribution here has been to produce a do-it-yourself (DIY) toolkit that makes it easy for museums to set up public scanning booths where visitors can bring along and digitise their own artefacts, alongside capturing stories about their personal meaning. Visitors can then donate their scanned objects and stories to the museum, allowing the 3-D models to be published and shared online and reused in virtual and augmented reality experiences. The implementation at the UK's National Videogame Arcade discussed above also captured visitors' stories of the exploits of the gaming miniatures they scanned and displayed the scans in VR at "life size" so that visitors could encounter their creations face to face.

The One Minute Experience: Object recognition technology has enabled a new way to experience museum exhibitions. Smartphone apps such as Smartify, Vizgu or Magnus offer visitors experiences described as "Shazam for art": The phone's camera recognizes the objects in the museum and offers information traditionally provided by a guide, often referred to as interpretive text (Serrell, 2015). However, an easily overlooked challenge is the design of the information that is offered. Once the app has identified the work of art, what should it say about it? Research shows that many museum visitors spend very little time studying interpretive text (Armitage, 2018). The One-Minute Experience offers an authoring tool for curators to write short, engaging texts suited for smartphone screens. The tool can be used with any mobile experience intended to offer visitors interpretive text about artworks. In tests, the tool has been demonstrated to help users write simpler and more readable texts, which have a greater chance of being actually read and understood by museum visitors. While this authoring tool

is currently available as concept-and-design documentation ready to be implemented in any museum app, we are currently developing an app that implements the concept and which will be freely available as part of the framework. (<https://gifting.digital/the-one-minute-experience/>)

Reflections

In our work with the GIFT framework, we have sometimes encountered a clash between new museology ideals of dialogical meaning-making and concerns about trivialising the visitor experience or distracting visitors' attention away from the artefacts on display.

While some museum professionals speak of a desire to facilitate interactive visitor experiences, moving from “museum monologue” to engaging visitors in “dialogue,” we have encountered different notions about what such a dialogue may entail. We have found that different notions often coexist internally at a museum, across different departments, staff groups or managerial levels, making it difficult to move the organisation towards more dialogue with visitors. Facilitating dialogue by digital means often complicates matters further. As stated by one of our museum participants: “Many of the challenges we face to growing our [digital] capacity are administrative—an institution that sometimes still sees tech as a layer and not an integral part of the visitor/user experiential fabric.”

Museums may benefit from re-imagining their own roles in facilitating dialogical formats, accepting that this does not only mean that the museum enters into conversation with visitors but also that the museum provides a background and inspiration for conversations that visitors would like to have with each other. Designers will note that visitors are already busily engaged in all sorts of dialogue—with other visitors, with their social media circles

through their smartphones, and more. These activities may sometimes seem more trivial than the dialogue that museums are eager to facilitate—e.g. people may use Instagram not only to share photos and stories about objects on display but also to share selfies of themselves in the museum. In our many practical engagements with museums, we have seen that it is challenging for some museum professionals to accept this somewhat more background role for the museum artefacts and the curatorial voice. However, we find that there is significant potential for creating experiences where visitors engage in creative ways with museum content, facilitating increased engagement and, indirectly, some kind of learning.

Preliminary analyses of gifts given by test users of Blast Theory's gifting app demonstrate that the messages users send to each other are, on the one hand, often quite personal and directed at the recipient of the gift; on the other hand, they tend in large degree to 1.) address the specific artefact and some aspect of its aesthetic or its historical or cultural identity; and 2.) attach a personal meaning to the artefact that relates it to the giver and receiver and their specific relationship. Consider, for example, the gift that the teenager "Kristin" made for her mother, a picture of the painting "Alice in Wonderland" by George Dunlop Leslie (Figure 6), along with the following audio message:

So, this picture is called Alice in Wonderland, from 1879, and the sofa reminded me a lot of grandma's sofa with the dolls. And the poem says that this is a big sister reading to her little sister, and I think you can imagine me and Leni sitting like this and her reading to me my favourite story.



Figure 6: *Alice in Wonderland* by George Dunlop Leslie at Royal Pavilion & Museums, Brighton & Hove. CC-BY-SA.

Kristin's message focuses on the meaning this painting has for the two of them and their family. The gift is a very personal exchange in which the museum artefact is made to serve as a mediator for a fond memory. As such, this encounter with the museum object evokes an ideal which art educators often strive for—that the viewer bring their own interpretations and meanings into the encounter and get inspired to explore the associations that the artwork gives them. This combination of a highly personal connection with artefacts, along with some reflection or questioning about the artefact, is evident in many of the gifts created with the app. An interesting challenge for our ongoing work is to carve out a role for the curatorial voice in these exchanges, for instance to offer more depth of information to those users who become curious about the artefacts.

Future Work

While the GIFT project is funded by the EU until the end of 2019, the university partners have committed to maintain and develop the framework for at least two more years after that, in order to ensure that the framework remains viable as a resource for museums in their ongoing work. We are optimistic that further cases of successful deployment of our tools and designs in museums will provide a basis for securing funding to develop the framework further.

In the shorter term, our priority in 2019 is to keep testing and developing the framework, as well as to develop further the practical and theoretical insights from the project into an edited book due to be published by the end of the project.

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