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Project Consortium

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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

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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)	
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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 deliverable provides the final report on the Action Research Module (ARM), which in the Grant Agreement is referred to as the Lead User Chance Process. The report presents the final work in ARM following the interim report (deliverable 4.2) and presents the main outcomes of the process: Recommendations on organisational change, recommendations on experience design, as well as a set of design and planning tools. Finally, the report presents an evaluation of ARM and shows a list of research publications and dissemination coming from ARM.

2. The Action Research Module (ARM)

The Action Research Module (ARM) of the GIFT project has been an action research process, consisting of a series of events and experiments with a panel of Lead Users, museum professionals from the EU and the US. The process was managed by researchers from the IT University of Copenhagen (ITU) and facilitators from Culture24 (C24). In this section, we first present action research as a scientific approach, before accounting for the actual process and participants.

2.1. What is action research?

A fundamental assumption of action research methodology is that we can only understand the human systems we are analyzing if we involve the members of the system in the inquiry process itself. It builds on a respect for local knowledge acquired in everyday practice. Action research is participatory, conducted by people who want to do something to improve their own situation (Sagor 1993). Action research is also experimental. In its classic form, it consists of a series of experiments with five phases (Susman & Evered 1978): First we have a diagnostic phase, where a problem is scoped. Then follows an action-planning phase, where the problem is reframed and an alternative course of action or experiment is mapped out. Then the actual action-taking as the experiment is carried out. The experiment is evaluated based on a specified form of data collection in order to establish external validation. Finally, the insights from the experiment is specified by identifying key learnings, preferably documented in a form easily communicated to others.

We consider the key characteristics of action research to be the following:
- Action research is problem-solving or change-oriented. The goal of taking action is altering the status quo in a particular way. By trying to change the situation, we gain a better understanding of it.
- Action research is experimental and experiential.
- Action research is iterative.
- Action research is evaluative, based on data-collection.
- Action research should document and communicate key findings.

2.2. ARM Participants (Lead User Panel)

The action research process involved participants from ten museums from EU and the US: three art museums, four cultural history museums and three museums with a mixed remit:

Participating institutions	Country	Short name
ARKEN Museum of Modern Art	Denmark	ARKEN
CAOS Centro Arti Opificio Siri	Italy	CAOS
Center for Studies of Holocaust and Religious Minorities	Norway	HLC
Danish Museum of Science & Technology	Denmark	DMS&T
Derby Silk Mill	United Kingdom	DSM
The Munch Museum	Norway	MM
Royal Albert Memorial Museum & Art Gallery	United Kingdom	RAMM
Royal Pavilion & Museums, Brighton Museum	United Kingdom	RP&M
San Francisco Museum of Modern Art	United States	SFMOMA
Tyne & Wear Archives & Museums	United Kingdom	TWAM

2.3. ARM Process

The process was structured around five two-day workshops during approximately 18 months with time for conducting local experiments in between. The participants each formed a local working group, ideally consisting of representatives from different departments, in which they designed and conducted an experiment with two iterations. Later they performed a second experiment of a more organisational nature with the aim of embedding knowledge gained in the process within the organisation and developing further knowledge.
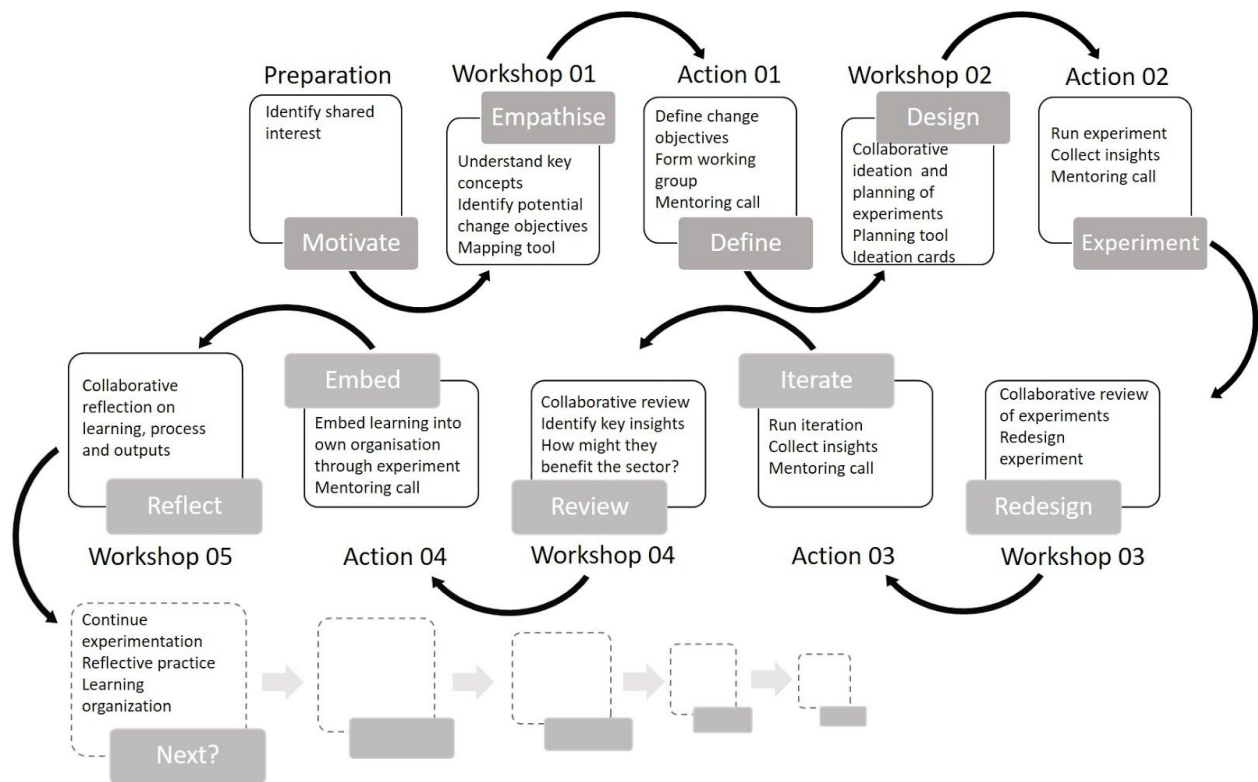
Model of the action research process as it unfolded in GIFT.

Workshop 01-03 have been accounted for in D4.2 Interim Evaluation Report, so we only account for the activities of the last two workshops.

Workshop 04 took place at the Munch Museum in Oslo on November 26-27 2018. The aim of the workshop was to review the iterated experiment that each participant had done (see D4.2) and distill the key insights from it. In turn, each participant presented their experiment and what they had learned from it to the group. All participants noted their reflections on post-its throughout the day. At the end of the day, affinity mapping was used to collaboratively sort the post-its into themed categories.[1] Then followed a round of voting in order to identify the categories that were most pertinent for the participants.[2]
For day two of the workshop the facilitators had collated categories and reformulated them as four challenges using the "how might we…?" (HMW) formula (Derby Museums 2014).[3] This formula is a proven method for ideation within design that prompts participants to look for opportunities rather than solutions. *How* indicates that there are possible solutions out there; *might* indicates that an idea might work or it might not - both outcomes are fine, as they contribute to learning; *we* underscores the collaborative aspect of the exercise and that you should actively try to build on the ideas of others. The group worked on collaboratively reformulating and refining the wording of the HMW challenges in order to ensure that everyone achieved ownership of them and felt they addressed the most pertinent issues. The participants were asked to choose one of the challenges – the one they found most relevant – and conduct an organisational experiment that could address it.

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[1] See https://designsprintkit.withgoogle.com/methodology/phase1-understand/hmw-sharing
[2] See https://designsprintkit.withgoogle.com/methodology/phase1-understand/hmw-voting
[3] See https://designsprintkit.withgoogle.com/methodology/phase1-understand/how-might-we

At the workshop participants also evaluated the prototypes (see section 3), the framework (see section 4) and the process tools (see section 5.3).

Action phase 04 consisted of the final round of organisational experiments at the partner museums. Again, researchers from ITU conducted mentoring calls with all participants. Building on previous success (see D4.2), the mentor calls were conducted in pairs in order to create synergy.

Workshop 05 took place at the Danish Museum of Science & Technology in Elsinore on March 21-22 2019. The aim of the workshop was to review the organisational experiments that each participant had conducted in their home organisation, refine the challenges from workshop 04, based upon their new insights, and develop recommendations that would be applicable to the museum sector in general. This work was canalised into two sets of recommendations that was developed further in the following months (see section 5).

At the workshop participants also evaluated the prototypes (see section 3), the framework (see section 4) and the process tools (see details in section 5.3).

Finally, we asked the participants individually and collectively to reflect on the entire ARM process and identify the key learnings they had gained from taking part in GIFT (see section 6). The workshop ended with a group discussion on what the "next steps" of everyone would be in order to ensure that key learnings would become embedded in their respective organisations in order to inform future practice.

After completing the ARM process, all participants collaborated with ITU and C24 in producing and validating the recommendations, tools and publications coming out of the ARM process and feeding into the GIFT website (the framework). Every participant was asked to write one or more experiment recaps or reflection pieces based on the experiments they had done in order to include concrete examples of work in the recommendations (see section 5.1).

After GIFT, actions and learning from ARM continues to influence our partner museums. Therefore, we have extended the model in Figure 1 beyond the GIFT project and into the future (see more details in section 6).

3. Prototype evaluation in ARM

Prototypes from the other work packages have been presented and evaluated in ARM at several occasions in the process, as presented in the interim report (D4.2) for the period up to November 2018. In the remaining part of the project, prototypes from work packages 2 and 3 have been presented to ARM participants on some further occasions.

At ARM workshop 04 on 26-27 November 2018, the latest versions of the WP2 and WP3 prototypes were presented to the ARM participants, who were invited to ask questions and give feedback. This provided the prototype teams with valuable input for further work with these prototypes. In particular, the Blast Theory team conducted a survey of the participants to determine whether they would prefer a native app or a web app implementation of the WP2 prototype. The results were overwhelming in favor of a web

app, something which heavily influenced Blast Theory's decision to redevelop the WP2 prototype as a web app.

Furthermore, most of the ARM participants were able to join the final conference of the project in Lisbon on 27 November 2019, and several used the occasion to try the final versions of the prototypes in the showcase session in the National Library.

Some of the ARM partners have responded to these interactions by expressing interest and eventually starting processes for deploying the prototypes in their home institutions. Brighton Museum has served as a testing ground for the WP2 prototype, and hosted a public deployment of the web app from Jun-Oct 2019 (see D2.5 and D2.6). Later on, the Munch Museum decided to contract a deployment of the *GIFT App* for several months in 2019-2020, representing the first commercial sale of this prototype.

The Munch Museum has served as a testing ground for the WP3 prototype (see deliverables D3.3 and D3.4), and are currently in dialogue with NextGame about developing a digital experience building on the work in WP3.

Finally, Brighton Museum has also participated in the development and testing of *One Minute*, and are in dialogue with the consortium about deploying both One Minute and Blast Theory's Gift app in 2020.

4. Framework evaluation in ARM

The ARM process has informed and contributed to the design of the GIFT Framework (D4.4) in numerous ways, as described in deliverables 4.2 and 4.4.

During the period covered by this report, the framework website has been evaluated by the ARM participants twice: At ARM workshop 04 on 26-27 November 2018, and at ARM workshop 05 on 22 March 2019. These evaluations gave valuable feedback and input to the further development of the website, as presented in D4.4.

5. Results from ARM: Recommendations and tools

Besides feeding into the development of the prototypes and the framework as presented above, ARM has resulted in a set of recommendations and accompanying design and planning tools, experiment recaps and reflection pieces. All of these have been formatted for and published at the GIFT website (the framework, www.gifting.digital) targeted at innovators working within the cultural heritage sector (see D4.4). Below we present the different elements as they are formulated on the website under the section Ways of Working (please see the designed version at https://gifting.digital/ways-of-working/).
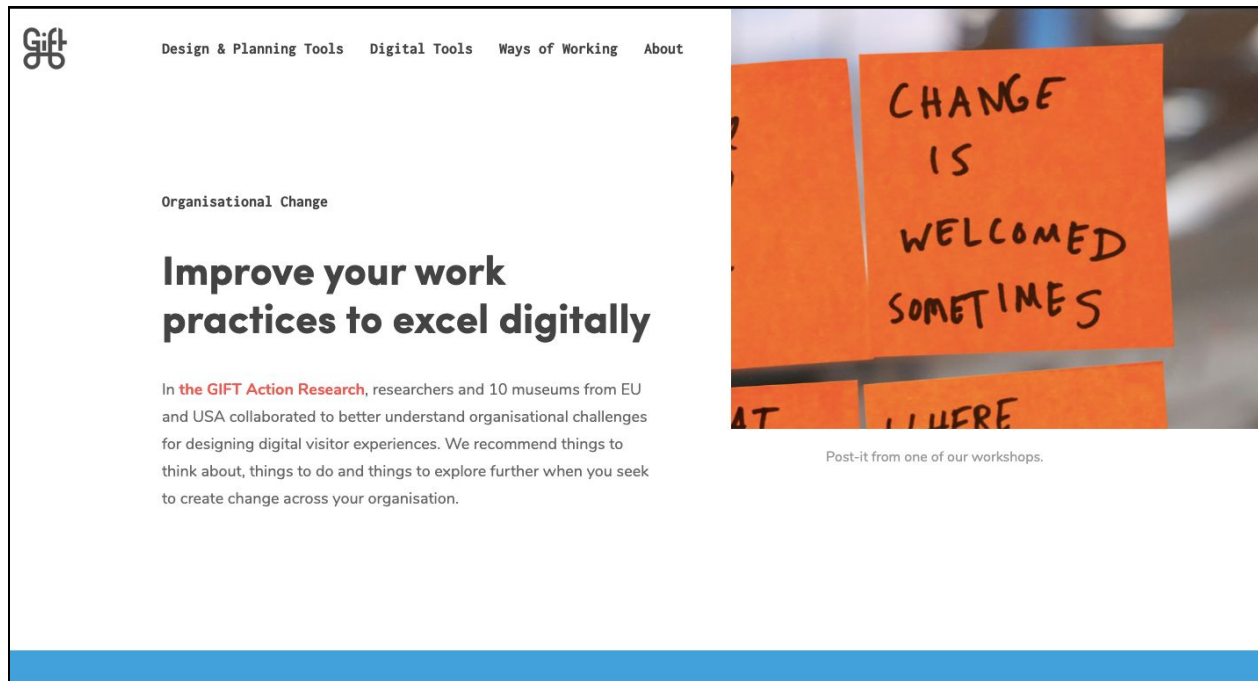
The recommendations on organisational change and experience design have been created in close collaboration between all participants in ARM, based on the work performed in the ARM process. Thus,

these recommendations have been authored and agreed upon by all participants, and the authorial 'we' used in the following sections refer to the group of ARM participants. The section is split in two. One part focuses on Organisational Change (see section 5.1), the other on Experience Design (see section 5.2).
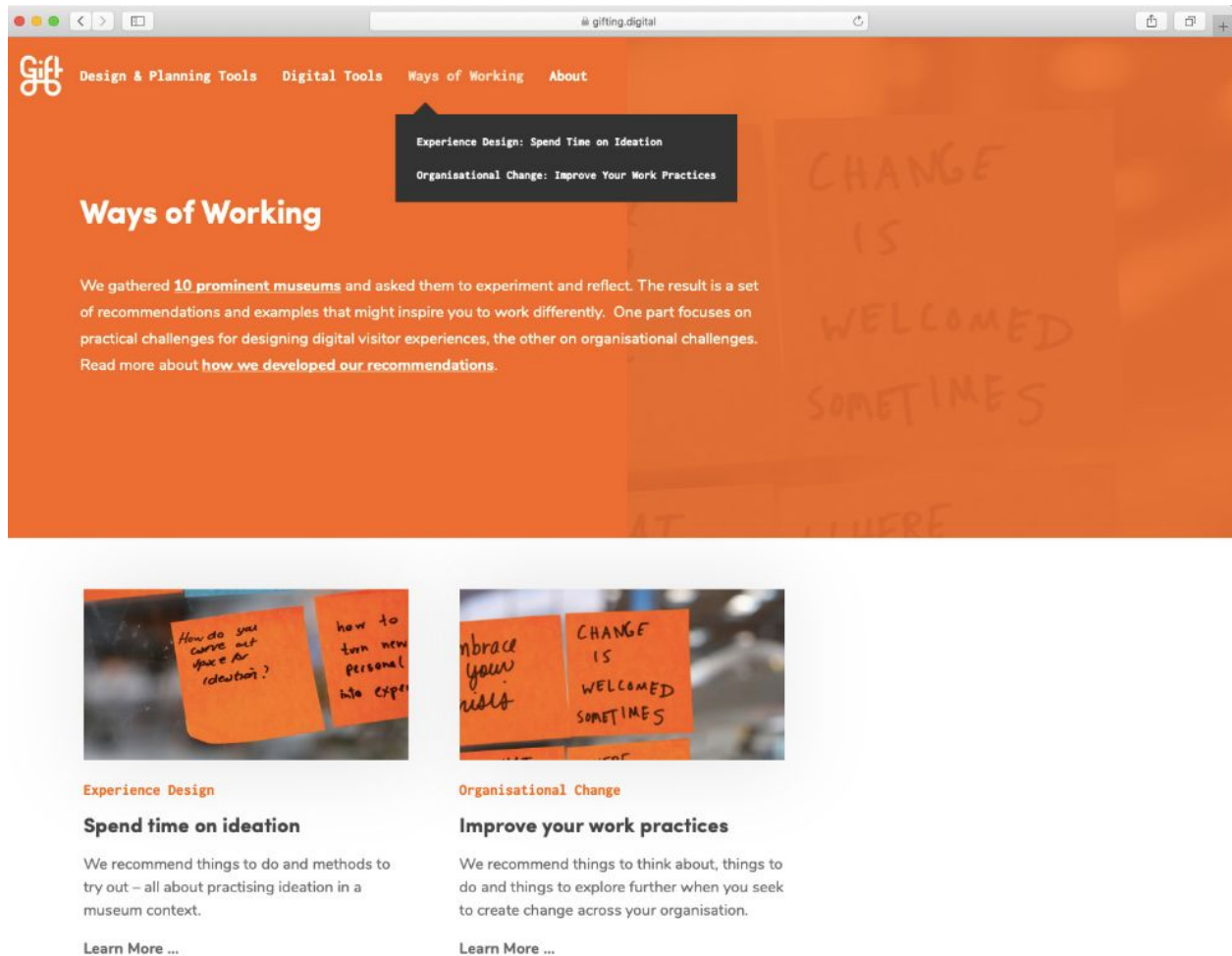
The Ways of Working section on www.gifting.digital.

5.1. Recommendations on Organisational Change

Top of the webpage with recommendations on Organisational Change.

The recommendations on Organisational Change consists of five parts: 1) Systems, 2) Culture, 3) People, 4) Understanding and 5) Change Strategies.

5.1.1. 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. 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 (link to external site).
- GLAM WIKI: A wiki on how to use Wikimedia to produce content (link to external site).
- Storythings: A website on telling stories (link to external site).
- Blog post by Melissa Terras on reusing digital content (link to external site).
- Blog post by Jennifer Staves on choosing storytelling over blogging (link to external site).
- Blog post by Chad Coerver on content strategy (link to external site).

Things to do:

- Embed human elements: Link to Derby Museums experiment recap (see below).
- Trigger alternative stories: Link to Brighton Museum experiment recap (see below).

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.

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.

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.

Was it successful?
Yes. Participants were able to follow the experiment, and the outcomes were interesting. It certainly showed that AI has the power to redirect the human gaze.

What did you learn?
We learned that correcting inaccurate data could encourage new discussions, and new ways of looking at objects. For instance, AI could identify architectural features in a local landmark that a social historian might not think to document. As a bonus, the experiment inspired a useful conversation about how we might map the use of online collections to different audiences.

What surprised you?
We had originally planned the experiment as a lab-like, almost clinical examination of documentation behaviour. But the conversation it inspired provided some useful ideas about how to develop a more audience-centric approach to digitisation. In part, that was probably because the structure of the experiment was encouraging a rethink of who might be using this data. In particular, a colleague with expertise in the natural sciences observed that natural science collections have two quite distinct audiences:

1. scientific researchers
2. artists looking for inspiration

This has encouraged a further publishing experiment. At present, we're working to publish images of these collections with more detailed classificatory data on our online collections for scientific researchers. But we also want to use a data-lite presentation on Pinterest for artists looking for inspiration. This is the first time we've ever applied an audience segmentation model to the publication of collection data.

What methods or tools did you use?
On a technical level, the DAMS we use is Asset Bank, which is based on Amazon Rekognition.

What other resources did you use?
My thinking behind the experiment was influenced by reading about some of the psychology behind behavioural economics, particularly Daniel Kahneman's 'Thinking Fast and Slow' (2011). That might seem like a long way from museum practice, but some of the heuristics identified by this research, which can lead to cognitive biases and plain errors in judgements, are really relevant. In particular the phenomenon of WYSIATI ('What You See Is All There Is': a focus illusion that tends to blind people to the surrounding context of a problem) could help explain why museum documentation practices can be good at creating structured data that describes the inherent attributes of objects, but are exceedingly poor at creating data that is meaningful to non-curatorial users. (Perhaps we need a 'behavioural museology'?). For example, museums will invest a lot of money in creating databases that allow users to search for objects from a fashion collection that were made between 1837 and 1901, but won't provide any meaningful data for a teacher searching for a 'Victorian dress'.

5.1.2. 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 space into the formalised 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 explore further

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

Things to do

- Start small: The Munch Museum experiment recap (link to recap, see below).
- Fail and experiment: Tyne and Wear Museum and Archives experiment recap (link to recap, see below)
- Depart in passion: Danish Museum of Science and Technology experiment recap (link to recap, see below)
- Collaborate across departments: The HL Center experiment recap (link to recap, see below)

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 thank 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.

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, 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 Kindergaten (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.'

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.

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.

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 a 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)

5.1.3. 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.
- 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 explore further

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

Things to do

- Ask people: RAMM experiment recap (link to recap, see below).
- Give up control: CAOS experiment recap (link to recap, see below).
- Step Outside: Derby Museums experiment recap (link to recap, see below).

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.

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.

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.

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 planed 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 another, 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, 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) where 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 cafè 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.

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 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.

5.1.4. 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 (link to external site).
- Let's Get Real 6: A project on the social purpose of digital technology (link to external site).
- The Impact Playbook: A guide to assessing impact (link to external site).
- The MASS action toolkit: A toolkit on museums and social action (link to external site).

Things to do

- Discuss pertinent issues: The HL Center reflection piece (link to piece, see below)
- Reflect on social purpose: SFMOMA reflection piece (link to piece, see below).
- Develop a shared understanding: The ASAP Map (link to the ASAP Map, see section 5.3).

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.

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.

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.

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 fulfil 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.

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

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.

5.1.5. 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.
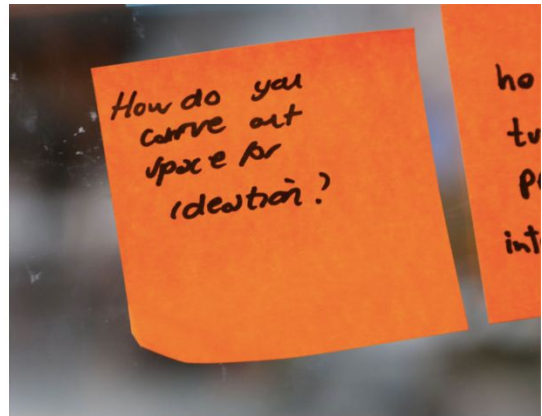
5.2. Recommendations on Experience Design

Top of the webpage with recommendations on Experience Design.

The recommendations on Experience Design consist of three parts: 1) Start with purpose & people, 2) Collaborate on ideas and 3) Test ideas.

5.2.1. 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.
- I 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 (link to the VisitorBox Ideation Cards, see section 5.3) 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

5.2.2. 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 a shared understanding across collaborators
- Let collaborator know why they are invited, yet be open: If you know exactly what you are asking somebody for, you will never end up anywhere new.
- Try out the ASAP Map (link to the ASAP Map, see section 5.3) - a paper based tool that helps you strengthen your ideas together with your collaborators.

Quotes

- "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

5.2.3. 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 could 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 (link to the Experiment Planner, see section 5.3) - a paper based tool that helps you plan an experiment to test your idea.

Quotes

- "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

5.3. Design and Planning Tools

D4.2. presents a set of process tools that the ARM participants used as part of designing their experiments. At workshop 04 and 05, we collaborated with the participants to develop these tools into generic process tools, useful for other museum professionals. Based on feedback from the participants, we focused on the design tools that they had used for designing and conducting their experiments.

At workshop 04, the participants were asked to give feedback for what was called the Concept Map, the Change Questions and the Experiment Planning Card in D4.2. Based on their feedback, the tools were iterated into two tools: The ASAP Map (a redevelopment of the Concept Map) and the Experiment Planner (a combination of the Change Questions and the Experiment Planner). Furthermore, the participants mentioned VisitorBox Ideation Cards as a tool that should be part of our tools output. Thus, the participants used the cards at workshop 02 (see D4.2) and found them very useful as a supplement to the other design tools. At workshop 05, the participants gave feedback on iterated versions of the tools, which informed further work on the tools.

The VisitorBox Ideations cards, the ASAP Map and the Experiment Planner are a part of the Design and Planning Tools section of the GIFT website (the framework, see D4.4), together with related tools developed through other work packages (Cardographer (WP6) and Scenarios (WP2)). The tools provide a concrete exemplification of how museums can work in line with the experience design recommendations. As such, they show different ways of supporting ideation, a key point in the recommendations.

Top of the Design and Planning Tools section on www.gifting.digital.

Below follows a brief presentation of the VisitorBox Ideation Cards, the ASAP Map and the Experiment Planner. Please see the appendix for a pdf version of the ASAP Map, the Experiment Planner and a selection of VisitorBox Ideation Cards.

5.3.1. VisitorBox Ideation Cards: Generate ideas

VisitorBox Ideation Cards is a card game that you print and use at a meeting with relevant collaborators to come up with innovative and thoughtful ideas for digital experiences. The purpose of ideation cards is to support collaborative design in a playful way (cf. Wetzel, Rodden, & Benford, 2017). They typically encode important design knowledge in a domain and suggest a range of design options of particular relevance.

VisitorBox Ideation Cards was developed by University of Nottingham, specifically for cultural heritage institutions, and focuses on the use of various technologies to support visitor experiences. Even though

the cards do include technologies among the design concerns covered by the cards, the suggested activity is not driven by technology. You start the game by thinking about the purpose of designing an experience and the people you want to reach, through discussing context and institutional goals. Next, you create a design brief, leading on towards generating and storyboarding design ideas. As a final stage, you broaden your view through disrupting the design and planning for future steps.

Using the cards became an important part of the work done by the ARM participants. The cards were considered "a great exercise for thinking concretely about tech". Some of the participants implemented the method in their home institutions afterwards. As one of the participants stated: "I really found the cards useful. I have used them loads since then and they really help you design a design brief and then think about what you can do and how you can do it."

5.3.2. The ASAP Map: Strengthen ideas

The ASAP map is a paper-based design tool that you print and use at meeting with relevant collaborators to facilitate a discussion about an idea. It is inspired by the idea of making maps for design reflection (Dalsgaard, Halskov, & Nielsen, 2008), as a reflection-in-practice intervention (Schön, 1983) that supports people in reflecting collaboratively on the context in which they design and on which way they are heading. You use the map when you already have a design idea that you would like to develop further with relevant collaborators, not by focusing on the idea as such but on the purpose behind it. First, you discuss the purpose and then talk about it through questions split into four categories: Awareness, Solutions, Alliances and Plans (ASAP). The name of the method, ASAP Map, both refers to the four categories, but also playfully encourages people to use it ASAP (As Soon As Possible) when having some kind of first idea.

The ASAP map was developed in collaboration with the ARM participants. 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. From the tests with the first version we could see that the map held a potential to support both micro level discussions on new perspectives, possibilities or barriers and more macro level discussions on strategies and strategic awareness. 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 comes up with a digital idea, you can use the map 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."

5.3.3. The Experiment Planner: Test ideas

The Experiment Planner is a paper-based tool that you print and use at a meeting with relevant collaborators to plan an experiment. The method is inspired by principles from Theory of Change, where the idea is to explicate ones theory around how and why an initiative might change an existing situation. Doing so helps to articulate what might be done in order to enable the change, and later on evaluate whether the desired change was realised or not (Connell & Kubisch, 1998; Weiss, 1999). With the Experiment Planner, the focus is not on changing existing situations but on experimentation as a

knowledge-generating or meaning-making procedure (Macdonald & Basu, 2008). When you have an idea, you can use the planner to think through how you might construct an experiment to test and learn more about that idea. On the front of the planner, you fill out six categories: Goal, Action, Who & When, Evaluation, Success and Next Steps. On the back of the planner, you find questions related to Outputs, People and Assets that can support a discussion around the experiment if needed.

Like the ASAP Map, the Experiment Planner was developed in collaboration with the ARM participants. They used a first version of the planner, building on a format previously used by Culture24, and subsequently gave feedback on iterated versions in two more workshop sessions. In these discussions, the participants 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. This was deemed useful later in the process, as one of the participants expressed: "I really like the Experiment Planner. I think it works really well. Having the questions on the back, those prompt questions, I think that is really helpful."

6. Evaluation of ARM

Workshop 05 ended with an evaluation of ARM. Here, the participants reported that participating in the cross-organisational action research process provided them with the opportunity to act on and think about the challenges they had encountered in their daily practice without being distracted or disabled by organisational constraints. ARM acted as a *safe space* for innovative thinking, which generated creativity and new possibilities. Besides this, the feedback from the participants centered around four themes:

- They valued that the process had been *slow*, allowing *time for reflection* and resulting in a *relaxed* atmosphere.
- They valued the *openness* and *honesty* of our discussions. They enjoyed the workshops as a space *free* from the normal routines, constraints and power relations where they could *share* ideas and experiences.
- They valued our *conversations* for the *learning* and *reflection* that they engendered.
- They valued the *international collaboration* with museum professionals with *diverse cultural backgrounds,* resulting in *multiple perspectives* on common issues.

ARM was intended to act as a catalyst for change at our partner museums. This has been the case for several partners, both in the sense that they have adopted concrete tools and methods developed in the project (see examples in section 3) and that they experimented with new ways of working (see examples in section 5.1). Based on their feedback during the evaluation, we believe that the participants will continue experimenting and working systematically with reflective practice. Correspondingly, in the GIFT book, we present action research as an approach for fostering reflective practice among museum professionals and transforming museums into learning organisations (see D5.3). During the ARM process, the participants functioned as a cross-institutional community of practice (Lave & Wenger 1991) – a community that they expressed a wish to continue after the ARM period. Therefore, we have created a closed group on Linkedin that can serve as a forum for continuing discussions from ARM and for supporting the museum partner in their continuation of implementing and evolving learning and changes enabled during the ARM period.

7. Research publications and dissemination

In addition to the contributions to the GIFT website (the framework) accounted for above, ARM has led to the following research publications and dissemination. The ARM participants have been involved in and invited to take part in producing some of these outputs.They were also encouraged to suggest ideas for publications, which resulted in article 3) (suggested by and produced in collaboration with Danish Museum of Science and Technology) and article 5) (suggested by and produced in collaboration with Brighton Museum).

1) Book chapter (in review): Action research as a method for reflective practice in museums, chapter 5, *Hybrid museum experiences: Theory and design,* ████████████████. (eds.). Amsterdam: Amsterdam University Press
2) Book chapter (in review): Ideation tools for experience design, chapter 7, *Hybrid museum experiences: Theory and design,* ████████████████ (eds.). Amsterdam: Amsterdam University Press.
3) Journal article: Olesen, A.R., Mortensen, C.H. & Jensen, J.T. (2019). Hvordan styrker vi museets digitale arbejdskultur?, *Danske Museer*, no. 5, vol 32.
4) Journal article (in review): Co-designing a co-design tool to strengthen ideation in digital experience design at museums, *CoDesign: International Journal of CoCreation in Design and the Arts*.
5) Journal article (forthcoming): Vejen til den gode ide: Tre designredskaber til udvikling af digitale museumsoplevelser, *MiD Magasin*.
6) Journal article (in progress): Error or serendipity? Provoking an improved keywording practice using AI, *Journal on Computing and Cultural Heritage*.
7) Journal article: (in preparation): How might we? Constructing recommendations on digital change with ten international museums, *Museum Management and Curatorship*.
8) Panel session: *Creating a bold and open culture in museums,* Europeana Conference 2019: Connecting Communities, November 27 2019, Lisbon. Chair: Jane Finnis, C24. Panellists: Kevin Bacon, Brighton Museum; Nikita Mathias, Munch Museum; Jacob Thorek Jensen, Danish Museum of Science and Technology; Sarah Younas, Tyne & Wear Archives and Museums; Rick Lawrence, RAMM; Dia Felix, SFMOMA.

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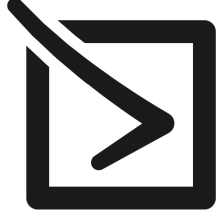
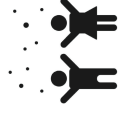# 9. Appendix

VisitorBox Ideation Cards

The ASAP Map

The Experiment Planner

CONSENT

Are you collecting any information that can be linked to a visitor? Has the visitor given fully informed consent?

Created by Arslan Shahid from Noun Project

DISRUPTION: EXPERIENCE 29/05/2019

106/221

HAPTIC FEEDBACK

Physical feedback is delivered to the visitor's body based on their location and progress

Created by Alfina Oleynik from Noun Project

IDEATION: BUILDING BLOCKS 29/05/2019

165/221

STIMULATE THE CHILDREN

The visitor is looking for a way to provide an education or otherwise positive influence for their children, or to simply share the burden of care

Created by Yeoul Kwon from Noun Project

DESIGN BRIEF: MOTIVATIONS 29/05/2019

59/221

COLLECT

The visitor builds a personal collection of content and/or achievements

IDEATION: BUILDING BLOCKS 29/05/2019

141/221

HIDDEN

The museum is located in a place that I rarely or never visit. It gets lost among other more exciting local attractions

Created by Ben Davis from Noun Project

DESIGN BRIEF: BARRIERS 29/05/2019

22/221

MEDIA CREATION

The visitor can capture and prepare digital media, e.g. graphics, photos, audio and video

Created by Arslan Shahid from Noun Project

DESIGN BRIEF: CAPABILITIES 29/05/2019

32/221

COLLABORATION

Visitors must work with each other

Created by abeldib from Noun Project

IDEATION: BUILDING BLOCKS 28/05/2019

169/221

LEARNING ACTIVITY

CONTEXT: ASSETS 29/05/2019

6/221

CHANGE VISITOR ATTITUDES OR BELIEFS

Created by Luis Prado from Noun Project

INSTITUTIONAL GOALS: GOALS 29/05/2019

220/221

PEACE

Do visitors expect a calm, contemplative atmosphere? Can this be broken?

Created by San Khoon Lay from Noun Project

DISRUPTION: CONSTRAINTS 29/05/2019

91/221

ASAP MAP

DEVELOP YOUR IDEA BY DISCUSSING ITS PURPOSE

1. Present the idea and agree on a main purpose.

2. Write down the purpose: _____

3. Discuss the purpose through the questions under A-S-A-P. Go back to adjust the purpose if relevant.

4. Make sure to agree on who does what if you come up with things you want to do during the discussion.

AWARENESS

How do you understand the purpose?

How do you and your colleagues talk about it in everyday work life?

How do you think visitors and other people understand it?

SOLUTIONS

Did you ever develop or use solutions with a similar purpose?

How did these solutions fulfil their purpose?

How can you build on what you learn from these solutions?

ALLIANCES

How is the purpose relevant for other teams at your museum?

How is it relevant for funders, partners, communities or other external groups?

How can you build alliances with them?

PLANS

How does the purpose fit with future plans and strategies of your museum?

How does it fit with what you think will be interests of future visitors?

How can you relate more to these future plans and interests?

EXPERIMENT PLANNER

PLAN AN EXPERIMENT TO TEST YOUR IDEA

GOAL
OUR EXPERIMENT WILL TEST...

ACTION
TO TEST THIS WE WILL...

WHO & WHEN
THIS WILL BE DONE BY...

SUCCESS
IF THE EXPERIMENT SUCCEEDS IT WILL...

EVALUATION
WE WILL EVALUATE THE EXPERIMENT BY...

NEXT STEPS
OUR PRACTICAL NEXT STEPS ARE...

NEED INSPIRATION? DISCUSS THESE QUESTIONS:

PEOPLE

Who does the experiment concern?

Why do you think the experiment is relevant for these people?

What will they get out of the experiment?

How can you learn more about them?

ASSETS

How can you use what you already have?

How can you use your colleagues' expertise and skills?

How can you use other projects at your museum?

How can you use external partners?

OUTPUTS

What do you hope to achieve by running the experiment?

How will you evaluate whether you achieve this?

How will you use and share what you learn?