Angles of vision: digital storytelling on the cosmic tide?

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ANGLES OF VISION:

Digital storytelling on the cosmic tide?*

*From Robert Rendall's poem, 'Angle of Vision'

A report exploring the opportunities and challenges of digital storytelling as part of the My Orkney Story project.

RSE *The Royal Society of Edinburgh* KNOWLEDGE MADE USEFUL

RGU ROBERT GORDON UNIVERSITY ABERDEEN

University of the Highlands and Islands Oilthigh na Gàidhealtachd agus nan Eilean

CONTENTS

INTRODUCTION

In this report we bring together findings from four workshops hosted as part of the My Orkney Story project.

It aims to address the opportunities and challenges of developing digital storytelling platforms through the lens of Orkney as a case study.

However, the findings from this report are also intended to have a wider relevancy to the development and implementation of digital story platforms at a local and international level. We invite you to use the findings from this report as a road map with the hope that it can help readers to consider all 'angles of vision' when developing such projects in the future.

Project Team

Dr Rachael Ironside

Senior Lecturer and Researcher at Robert Gordon University. Her research interests concern supernatural folklore, tourism and engagement with place through storytelling. Rachael led on the Orkney Folklore Trail project and is a co-investigator on the Storytagging project.

Professor Donna Heddle

Director of the award-winning The University of the Highlands and Islands Institute for Northern Studies and Chair of the UHI KE Sector Tourism Group. Her research interests are Scottish and Northern Isles cultural history, Renaissance language and literature, and cultural tourism.

Dr Stewart Massie

Reader at Robert Gordon University working with the AI group in the School of Computing. Stewart worked on the Orkney Folklore Trail project, and is leading the digital platform creation for the Storytagging project.

Key collaborators

We would like to thank each one of our key collaborators who have been instrumental in supporting this project.

- Robert Gordon University
- The University of Highlands & Islands
- Orkneyology.com
- VisitScotland
- Orkney Renewable Energy Forum
- Destination Orkney
- Orkney Islands Council

BACKGROUND TO THE MY ORKNEY STORY PROJECT

The My Orkney Story project emerged from a workshop hosted by Robert Gordon University (RGU) on SMART Tourism in 2019. The purpose of this workshop was to work in collaboration with key stakeholders in Orkney (including the University of Highlands and Islands, Orkney Islands Council, Highlands and Islands Enterprise, VisitScotland, Scottish Natural Heritage) to identify innovative technological solutions for challenges facing Orkney's tourism sector.

The potential to develop a digital storytelling platform emerged from this workshop as a potential solution to disperse tourism from overcrowded 'hot spots' on the island, increase the experiential offering of rural areas and engage visitors and locals with the diverse stories, heritage and culture of the island.

Following the workshop, a working group was established to explore the potential for a broader digital platform to collect, curate, share and preserve Orkney stories. The purpose of this platform will be to provide a digital resource for visitors and the local community to access a collection of stories that can be customised and provide self-guided trails of the island.

At an early stage, however, the group identified initial challenges that required further investigation before moving towards seeking further funding or developing a platform. These challenges present common issues in the development of digital platforms, including the collection and representation of stories and the sustainability of digital platforms beyond the end of the project.

In late 2019, the working group led by Dr Rachael Ironside, Professor Donna Heddle and Dr Stewart Massie applied for funding from the Royal Society of Edinburgh Research Workshop strand. The funding bid was successful and provided the opportunity to host a series of four workshops throughout 2020 to address the challenges identified

Due to the wider applicability of these challenges it was intended that the findings developed from these workshops would benefit not only the creation of a digital story platform on Orkney but have wider reaching impacts for the development and implementation of digital story-based projects locally, nationally and internationally.

*My Orkney Story project
'Workshop 1 - Project Scoping'*

Research questions

The workshops hosted for the My Orkney Story project, and the proceeding report aim to address the following questions:

1. How should stories be collected, curated and shared in a way that accurately represents the heritage, culture and identity of the local community?

2. How can stories be presented in an engaging and experiential way through a digital platform?

3. How can a digital platform be maintained and sustained after the end of the project by a local community?

The Workshops

Four workshops were hosted as part of the My Orkney Story project. Each workshop followed a theme to help address the project's research questions.

Workshop 1 – Project Scoping

Workshop 2 – Story Collection and Curation

Workshop 3 – Digital Feasibility

Workshop 4 – Sustainability

Due to restrictions imposed by the Covid-19 pandemic only Workshop 1 was hosted in-person as initially planned. The further three workshops were hosted collectively as part of an online symposium called 'Angle of Vision: Storytelling on the cosmic tide?'.

The Symposium

The symposium, 'Angle of Vision: Storytelling on the cosmic tide?', was hosted online on Thursday 28th January 2021. The event hosted three workshops throughout the day each lasting approximately two hours with up to 30 attendees in each session.

The workshops followed the themes of story collection and curation, digital feasibility and sustainability, and invited participants to take part in interactive sessions involving guest speakers and collaborative discussion of key issues around each of the themes.

We would like to thank our guest speakers who provided their expertise and insight into the topics addressed:

• Dr Krista Murchison
(Leiden University, The Netherlands)

• Dr Valentina Bold
(Freelance Storyteller, Scotland)

• Professor Peter Reid
(Robert Gordon University, Scotland)

Dr Krista Murchison

Professor Peter Reid

Dr Valentina Bold

THE FINDINGS

In the sections that follow we reflect on the findings from the workshops hosted as part of the My Orkney Story project.

In the first section, we focus on story collection and curation by drawing upon the talks and discussion hosted by Dr Valentina Bold and Dr Krista Murchison. We suggest that all 'angles of vision' need to be considered to gain a full perspective of stories before embarking on the gathering process. This is followed by a discussion on the curation and preservation of stories and the importance of accessibility, representation and presentation.

In section two, digital feasibility is examined. Here we explore the key issues of creating digital platforms with a particular focus on Orkney and the challenges and opportunities presented in the development of digital storytelling tools by considering the insights shared by Professor Peter Reid and subsequent group discussion.

A three-stage process is identified for the development of a digital storytelling platform that meets the vision of stakeholders on the Orkney Isles. In the final section, we reflec on sustainability which is a key challenge in the viability of digital storytelling platforms. A number of questions are considered to provide a roadmap for navigating these challenges and realising potential opportunities.

Each section also provides a graphic representing the findings from each workshop to illustrate the key issues and options for developing digital storytelling platforms. We invite you to use these resources in isolation or collectively to assist with the planning of similar projects in the future.

STORY COLLECTION & CURATION

In this section we explore the findings that emerge from the first workshop hosted on story collection and curation. This workshop was intended to address the first esearch question:

How should stories be collected, curated and shared in a way that accurately represents the heritage, culture and identity of the local community?

Part 1: Storytelling and Angles of Vision

In Part 1 on story collection and curation we draw upon the presentation provided by Dr Valentina Bold, and the further discussions generated around this as part of the workshop.

The talk provided by Valentina proposed a model for approaching storytelling projects that encapsulated all 'angles of vision'. This includes four angles from the point of view of the storyteller:

1. What is a story?

2. Who tells a story? And who owns them?

3. Where are stories? (how to find them)

4. How should stories be shared?

And a fifth angle orientated towards understanding the audience of the story and their role – who is listening?

We use the notion of an angle of vision to unpack these ideas next.

What is a story?

Several examples of stories were proposed by Valentina, showing that the term "story" is an organic and mutable concept. She noted two main categories, clarifying that they can be further categorised by published collection; individual storyteller, and specific geographical location.

MUCKLE TALES	WEE STORIES
Märchen (fairy tales of wonder)	Jokes & Riddles
Legends	Proverbs & Sayings
Myths	
Anecdotes/ Tall tales	
Tales of the past	

Who tells the story?

In the workshop it was noted that anyone can tell a story, but some may do storytelling better and know about certain topics. However, regardless of who tells the story there are considerations around **who 'owns' a story**.

When sharing stories as part of a digital project, it is important to consider aspects such as copyright and regulations around GDPR. Some stories may require consent to be told and this should be considered in advance.

In addition, teams working on story projects should consider the wider moral stance of sharing stories. Often stories represent communities and therefore come with a responsibility in terms of identifying who and what is being represented through them. As such, we should ask:

If it is okay to tell these stories, and if telling them is worth any potential risks?

STORY COLLECTION & CURATION

Where to find storie ?

Stories can be found everywhere and this was illustrated through the images of stories told in situ during the talk. Stories may be found through word of mouth, in the media, through archives and in formal contexts such as events and guided walks.

Importantly, a key consideration that was raised at the start of this session was the role of the project team and the storyteller. Valentina challenged our perceptions right at the start of her talk when she postulated that we should not talk about "collecting stories", which invoked images of a Victorian antiquarian's butterfly collection rather than a living oral narrative, but instead we should refer to the process as "sharing stories".
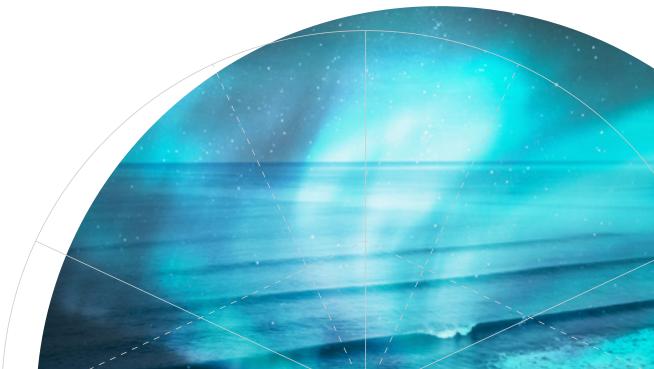
This was actually a key point as it resonated with issues to do with ownership, presentation, representation, audience and the purpose of an archive which were key issues throughout the day. Throughout the talk, she explored how the word collection should perhaps be avoided as it implies conquest/ management of stories. Instead, stories should be seen as living entities and treated with respect.

How should stories be shared?

When sharing stories, it is worth considering how digital platforms can capture the **'performance'** of the story. The audience can be quite difficult to predict when stories ar made digital – encouraging the audience to get to know the storyteller in a digital form can help with creating an experience. She postulated that the best way to tell some stories is in a live touring context or possibly in a book format, and a digital format may not always be the best vector to present a story in — as such it is important to ask:

Why a digital format is being used and if it is the most appropriate?

STORY COLLECTION & CURATION

Part 2: Collecting, Curating and Preserving Stories

In part 2 of this section on story collection and curation we reflect on the talk and discussion hosted by Dr Krista Murchison. The focus of this discussion was on the collection, curation and preservation of stories. In the findings that follow, we draw upon key reflections for consideration in how story projects are approached and managed.

The collection and archiving of stories

Digital storytelling projects will involve a process of collecting and storing stories for the presentation of digital outputs. Three areas of reflection were identified by Krista at this stag and deliberated by participants:

The role of the curator:

The format that a collection of stories is presented in can be influenced by the values and ideologies of the curator. It can also shape the way that stories and information are used. An archive of stories does not just create knowledge it shapes knowledge (e.g. the systematic exclusion of women's stories from archives in the past has shaped the way that the history of women and their stories are told).

A digital storytelling project should ask:

Whose stories get told and whose voices get left out?

This was a significant issue for discussion throughout the workshops. The strength of digital archives being able to accommodate multiple voices was considered a benefit of digital storytelling projects. These projects may also provide an opportunity to re-evaluate our practices to form new examples of best practice in this area.

Storing stories:

Physical archives have space constraints, and digital archives may help to alleviate some of these issues but they can also be limited by material constraint (such as server space, time available to the curator, metadata).

A digital storytelling project should ask:

What resources and digital space are required to collect and store stories?

Storing stories:

Any digital story collection or archive will need to be made 'findable' and this requires consideration of the metadata associated with story archives. Metadata is the underlying definition or description of a story which makes it discoverable. Consideration of what metadata should be used to define or describe a story should occur in the collection and curation stage. However, curators should be conscious of the potential bias and ideology which may be embedded in how metadata is formed.

A digital storytelling project should ask:

What metadata should be associated with digital story collections and how can this be representative?

STORY COLLECTION & CURATION

The presentation and curation of stories

Stories can be presented in multiple formats, although most frequently they appear in written and audio form. The written presentation of stories is slower and tends to be filtered to a greater extent during the curation stages. Oral stories are often quicker and are defined by the 'way' they are spoken (tropes/ traditions/ language). As such, how a story is formatted can influence the way it is told.

Cultural consideration is important when thinking about story collection and curation. For instance, imposing written formats on oral traditions may be considered colonial by some cultures and can therefore have political implications. Curators should, therefore, consider the traditional format a story is delivered in and whether reformatting is appropriate. In addition, not all information can be written down (e.g. family recipes may be passed down through practice and performance rather than in a written form) and may only be shared through visual/ audio/ performative means.

Projects should, therefore, consider the appropriate format for presenting stories taking into consideration issues such as accessibility and appropriateness based on the type of story and its cultural background.

A digital storytelling project should ask:

What is the most appropriate format for presenting stories in?
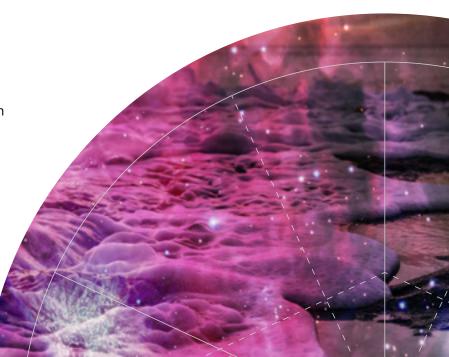
Preservation of story material

The process of story collection and curation can often involve the intention of preservation. Digital story collections provide an opportunity to preserve intangible heritage for future generations and can provide a valuable output for projects. However, the role of preservation in such projects should be carefully considered and comes with a range of ethical and moral responsibilities. Below we highlight some key observations from the workshop:

- Not all cultures, communities or individuals value preservation and as such it is relevant to ask before embarking on a digital storytelling project if preservation is important/ valued to the communities we are engaging with? While preservation is often seen as an inherently good thing, some individuals may not want aspects of the past/ their culture preserved.

- In preserving stories is also important to consider the difference between library (current) and an archive (historic). Is preservation for historical archiving, or intended to be a present and accessible resource? This will impact issues of curation and representation in a digital form.

A digital storytelling project should ask:

Is the preservation of stories an intended and appropriate output? And what is the role of preservation?

STORY COLLECTION & CURATION

Part 3: Best Practice Guidance for Digital Story Collection & Curation

In part 3 we reflect on key issues and best practice from the story collection and curation workshop. The main key point and exemplar of best practice from the entire session was the discussion engendered by both talks as to whether we should be 'collecting' or 'facilitating'.

The consensus was that this should be

a collaborative exercise where the storytellers become co-workers in a project rather than just providers of stories.

Ownership of stories and the purpose and scope of the digital archive were also key – as was the inclusion of hitherto excluded voices. Moving to digital platforms was seen as an opportunity to reflect and refine our thinkin about the purpose of story collecting and sharing with a view to creating sustainable archives with community ownership and engagement and a legacy for the future.
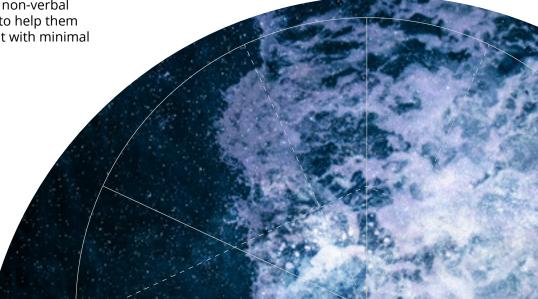
Finally, we offer some key tips shared by Dr Valentina Bold on working with digital media to record stories:

1. Build a rapport with the people you are recording and ensure to get their permission

2. Think about the flow of the recording (s that you capture the telling and not your own voice)

3. Choose a platform you are comfortable with and do a test run in advance to check that technology works before the session

4. Make sure you have a good microphone and turn video off if you can to help wit connection.

5. Try to keep recordings to a maximum of 45 minutes (this is to help with quality of the recording and fatigue)

6. If recording over the phone, mobiles are better to record from than a landline.

7. Label your recordings.

8. Try and verbalise or provide non-verbal interactions with storyteller to help them to 'tell the story' naturally but with minimal interruptions.

These concepts were further explored in workshop 3 in a comment from Mark Jenkins who noted that Digital Storytelling kits were part of the legacy of Orkney Story Stack, part of a national project with Scottish Book Trust. Libraries have these kits available. More about this project and available kits can be found at:

https://digital-stories.scot

STORY COLLECTION AND CURATION

How should stories be collected, curated and shared in a way that accurately represents the heritage, culture and identity of the local community?

Collecting, Curating and Preserving Stories

The role of the curator
Whose stories get told and whose voices get left out?

Storing stories
What resources and digital space are required to collect and store stories?

Making stories findable
What metadata should be associated with digital story collections and is this representative?

Where are stories?
How to find them

3

How should stories be shared?

4

Who is listening?

5

Who tells a story?
And who owns them?

2

Angles of Vision

What is a story?

1

The Presentation and Curation of Stories

Formats
What is the most appropriate format for presenting stories in?

Library or archive?
A library is current and an archive is historic.

Preservation
Is the preservation of stories an intended and appropriate output? And what is the role of preservation?

DIGITAL FEASIBILITY

In considering digital feasibility our aim is to identify a common vision for developing a digital storytelling project in Orkney that meets the requirements of the different groups involved.

It is also to consider alternative technical solutions to meet these requirements, and final y highlight some of the key issues that will need to be resolved as the project progresses. In the following section of the report we reflect on the talk by Professor Peter Reid and the collective discussion around digitisation to answer the research question:

How can stories be presented in an engaging and experiential way through a digital platform?

To capture the outcome of the workshop the following issues are discussed in relation to:

- identifying key stakeholders, that are interested in the development of a digital story platform; and to identify their requirements for a digital story platform;

- evaluate and assess the feasibility of potential functional requirements and look at alternative development approaches; and

- consider ongoing challenges that may need to be addressed.

Digitising Heritage & Stories

The workshop on digital feasibility opened with a talk from Professor Peter Reid who reflected on his work digitising stories as part of cultural heritage projects. Peter emphasised the importance of cultural heritage being an iterative and participatory process, and the role that technology can have in fuelling engagement with cultural heritage in a range of communities.

Technology can help to democratise heritage and we should consider how a digital storytelling platform can help to encourage engagement and participation in local heritage. Furthermore, Peter reflected on the impact of technology and stories for different audiences and the need to be cognisant of this variety. He identified four different audience types whic are important to consider for digital storytelling projects and may impact the development and sustainability requirements. These include:

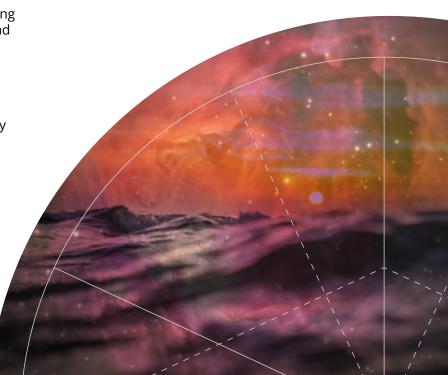**The deliberate audience:** the audience that have been targeted by the digital platform.

The participative audience: the audience that actively engage with the content and may provide additional input.

The accidental audience: the audience that may stumble across the content.

The dream audience: the audience that you really hope will see the story content.

For these audiences, the experience with digital stories may vary. For some it might be a short-lived and transitionary experience such as engaging with a story through a mobile app at a historical site. However, for others the experience may be enduring and long lasting if a personal connection or relationship is formed with the story content provided.

As such, before embarking on digital storytelling projects it is important to understand who our audiences might be and what relationship they may form with the content provided. This can help to shape discussions around feasibility and development.

Stakeholders, Requirements and Vision

There was discussion across all workshops on what functionality a digital platform should provide. The main challenge is to digitally capture stories in a somewhat consistent format that is rich enough to be expressive for storytellers but that can also be easily made available to story-seekers.

Discussion with stakeholders in Orkney identified a vision to develop a location-aware content management platform to support the curating, capture, storage and distribution of stories both individually and as linked trails. To do this, the platform should deliver location-aware content at locations around the island. For outside locations, GPS could be used to monitor user proximity to tagged locations, with alternative technologies available for indoors, e.g. Bluetooth beacons.

This platform could also support itineraries to be planned in advance, appealing to visitors looking to organise their trip prior to visiting the islands, which is currently difficult to d

The application should be able to scale up either: as the number of stories grows giving increased coverage across the islands with new types of stories or themes included in the platform; or as increased engagement by story-seekers makes the platform more popular. While this is a story platform, the definition of a story will need to be considered and defined perhaps quite broadly as we recognise in the previous section.
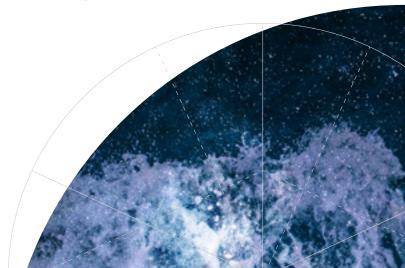
The stakeholders in the project can be considered in terms of **storytellers** and **story-seekers**, although users may well play both roles at different times. Storytellers, covering academic, industry, professional storytellers, community groups and government organisations, may be special interest groups, museums, tourist attractions, destination marketing organisations, or many others. For storytellers, the web application should provide support for the uploading and management of stories, along with associated metadata (e.g. location, source, topic, links, etc) providing additional relevant contextual information.

The availability of metadata allowing content to be organised, searched and filtered on a wide range of facets, providing a much more focused experience to the story seeker based on their specific requirements. A set of standard templates for each resource type is one approach, allowing producers to maintain the information themselves without any technical support. Longer term this "no tech, no coding" approach should support sustainability as the information grows and develops beyond the initial timeframe of the project with minimal maintenance costs.

For the story-seekers, who may be anyone seeking to engage with stories (such as communities or visitors) there should be access to the data in different contexts, on differen devices and by different methods e.g. search, browse or recommendation. Stories can be explored remotely using search facilities either directly or via map-based interfaces, while trips may be planned by selecting trails.

At a location when travelling the focus will be on mobile devices: specific story trails can be selected and followed using GPS; location-aware notifications could recommend nearby locations to visit. The key here is to provide alternative views of the content to fit the story seeker's location, context and preferences. Longer term the content repository may become a resource that application developers can harness in many different ways to develop innovative products.

There is potential for the application to develop further to supply data analytics, user personalisation, recommendation and gamification among other possible functionality.

Digital Solution

There are two distinct components to a solution: first the availability of stories; and then the development of the digital platform to collect, store, manage and view these stories. While this section of the report is focusing on the digital solution, identifying stories and making them available is also a substantial undertaking. It may be that an initial set of prepared stories already exists but to maintain a dynamic application there needs to be a steady stream of new content.

Before development even begins a stage 0 could be considered by making a minimal functionality website available to collect and display stories in order to maintain a level of interest in the project. This has proved successful for previous projects such as Northword (www.northword.online/) which used a website for story gathering ahead of the final story platform

A staged development approach is proposed for the technical development of the full platform in order to deliver a comprehensive digital platform developed to host stories and trails about locations in a range of multi-media formats. The application would be cloud hosted giving flexibility to scale to meet any level of demand, as well as allowing easy access for all device types. Benefits of a staged approach includes allowing lessons learned at each stage to inform the next stage of development. The development of the digital platform may be separated into a set of distinct tasks as follows:

Stage 1

- **Build Content Repository:** develop a flexible secure database to store items with differen content types. An API makes basic methods available that allow stories to be uploaded and maintained.

- **Develop Content Management Interface:** a front-end application will be developed for content producers that allows content generation and maintenance intuitively with a no coding required interface. A set of standard templates supporting rich metadata and links will promote a consistent application look and feel.

- **Develop Basic Web Application:** here the focus is on development of basic story viewer for PC and mobile viewing to support both storytellers and story-seekers.
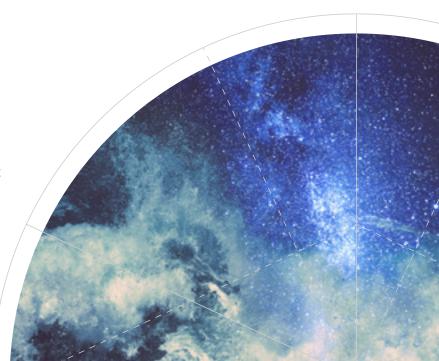
Stage 2

- **Develop Mobile Application:** here the focus is on development of functionality for the local experience. A cross-platform mobile application to incorporate additional functionality requiring direct input from the mobile device. For example, GPS or custom beacons may be employed to highlight nearby content and/or to push information to the user about local cafes, shops or galleries. The mobile application can support evaluation and analysis in addition to encouraging return visits.

- **Develop Story-Seekers Web Application:** here the focus is on development of functionality for the remote experience to support, search and browse functionality by location, topic, era, etc.

Stage 3

- **Recommendation, Data Analysis and Gamification:** the interaction data captured in the mobile application will be used to build a personalised recommender system. A data analytics dashboard will be developed to present key metrics that support building a better understanding of visitor behaviour for policy development. Gamification fo story-seekers can be introduced at this stage with collections to acquire or content to unlock.

The staged development approach gives the outline of a route map to delivering a solution. However, it may be that funding availability will dictate development progress, in which case the stages could be further broken down into smaller stages of development or combined in response to the funding available.

DIGITAL FEASIBILITY

Challenges

A number of outstanding challenges need to be considered and resolved to provide the required level of clarity for development of the project to progress and for digital feasibility to be assessed. These include the following:

- What is the purpose of a digital storytelling platform?
- How to maintain quality control in a digital storytelling application?
- What are the opportunities for future developments?
- Should visitor feedback be captured?
- What funding sources are available?

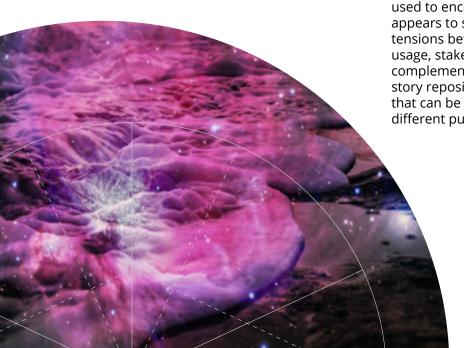## What is the purpose of a digital storytelling platform?

The requirements for a digital storytelling platform may vary depending on the audience and community the content is intended to reach. There are a range of stakeholders, each with slightly different expectations and requirements from what will be a single platform. Potential storytellers include traditional storytellers, special interest groups, historic societies, museums, destination marketing organisations, etc; whereas story-seekers can be just as diverse a group with tourists, local visitors, storytellers themselves, etc.

From one perspective the platform may be seen as being for digital collection of authentic stories for preservation, and from another it is an almost commercial resource that can be used to encourage tourism. Discussion to date appears to suggest that, while there are some tensions between commercial and community usage, stakeholder requirements can be complementary and need not conflict, with the story repository being a community resource that can be employed in different ways and for different purposes

How to maintain quality control in a digital storytelling application?

There are two aspects in this challenge in relation to who will be allowed to enter stories and who is authorised to approve and release content. The most open approach would be to allow any storyteller access to add content to the digital platform. However, that raises issues on maintaining consistency and quality with the likely need for full moderation. Hence access to the platform is likely to be restricted to approved content providers, which then adds the requirement for a selection process following some criteria.

The selection criteria may focus on quality, breadth of content, and perhaps also on for example restricting competition. The storytellers, once selected, may be given control to release and publish stories possibly with a limited number of templates, however, concern over quality may result in a more robust process with some level of central oversight built in.

DIGITAL FEASIBILITY

What are the opportunities and threats for future developments?

Key opportunities are in expanding coverage, features and increasing engagement. Coverage and engagement can be extended by having a single point of delivery for stories all over Orkney, with potential to extend the approach to other islands or the mainland. From a technical perspective the opportunities are to extend either functionality by extending gamification, multi-media and multi-lingual content; or type of stored content to perhaps include story related events.

Other areas of opportunity include the potential to extend the platforms relevance to a broader range of stakeholders, for example as a teaching resource. Opportunities to monetise the platform could also be considered with perhaps licence access to the repository for the development of commercial applications. The main threat was considered to be changes in technology and hence developing such that new technology can be easily incorporated is important.
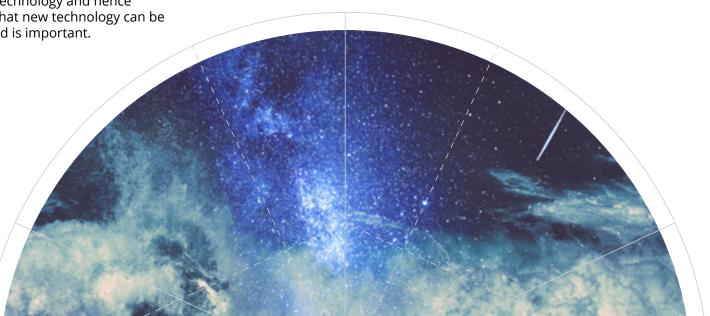
Should visitor feedback be captured?

The workshops generated discussion on support for explicit visitor feedback in the form of either content ratings or posts with comments. Feedback was generally thought to be valuable but with challenges on approach and level of user engagement.
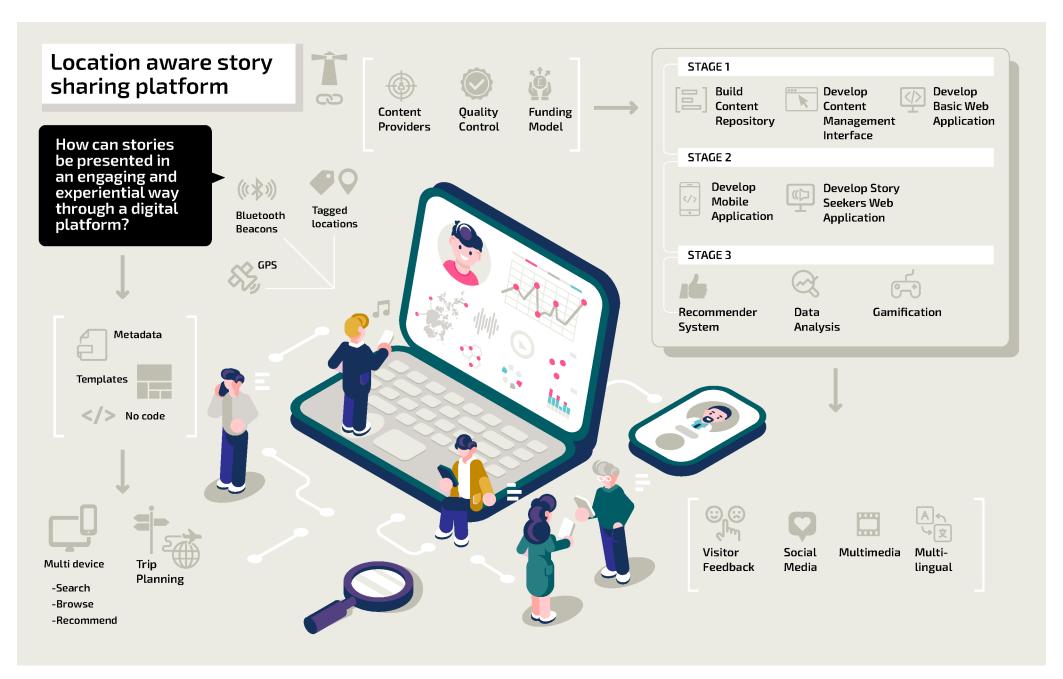
On content ratings perhaps a simple thumbs up for good content may be sufficient rathe than full five-star ratings scheme. On users posting feedback posts with comments, there are challenges on resources for moderation of content. The preferred approach at least initially is likely to be easy integration with existing social media platforms.

What funding sources are available?

The biggest factor in determining digital feasibility is likely to be availability of funding in relation to both progression of the project and the development route selected. There are alternatives. The full platform could be produced as part of a university funded research project, or as a purely commercial development from a web / mobile application developer with experience in delivering this type of integrated solution.

The cost of development of the full platform is likely to be substantial, and may be difficul to fund as a single project. The staged development approach provides the potential for the project to progress in an iterative development as a set of independent or concurrent projects with either a commercial partner or as university research projects.

Location aware story sharing platform

How can stories be presented in an engaging and experiential way through a digital platform?

Bluetooth Beacons

Tagged locations

GPS

Metadata

Templates

</> No code

Multi device

- Search
- Browse
- Recommend

Trip Planning

Content Providers

Quality Control

Funding Model

STAGE 1

Build Content Repository

Develop Content Management Interface

Develop Basic Web Application

STAGE 2

Develop Mobile Application

Develop Story Seekers Web Application

STAGE 3

Recommender System

Data Analysis

Gamification

Visitor Feedback

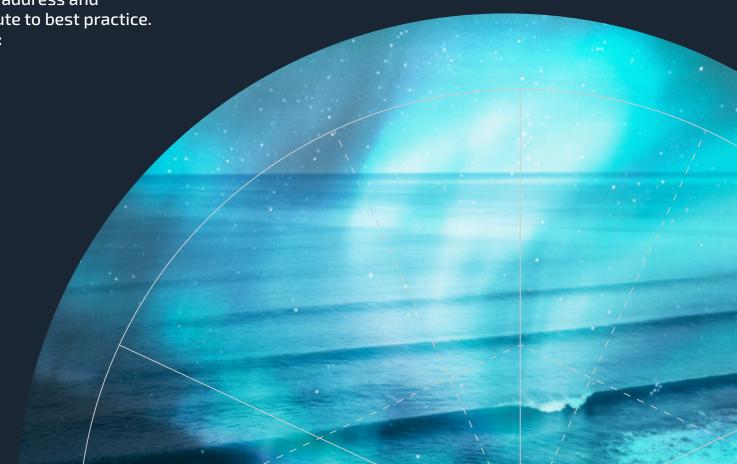Social Media

Multimedia

Multi-lingual

SUSTAINABILITY

The sustainability of digital storytelling platforms emerged as one of the key challenges for stakeholders embarking on projects. This issue is particularly prevalent for projects that involve time-limited funds that are established to create and curate platforms but provide limited longer-term resources.

In this section of the report, we address the key challenges of sustainability, important questions to address and provide potential opportunities and a route to best practice. We aim to answer the research question:

How can a digital platform be maintained and sustained after the end of the project by a local community?

SUSTAINABILITY

Challenges

A number of challenges exist in relation to the sustainability of digital storytelling projects. These include, but are not limited to:

- The emergence of new information and stories after completion of the platform
- Sustaining visibility of a platform in a competitive and evolving environment
- Ownership of projects that emerge from time-limited funding sources
- Maintaining the human resource to sustain a digital platform
- Keeping up with fast-paced technological change (particularly mobile technology)
- Sustaining the range of resources required to maintain a digital platform
- Navigating permissions for the use of stories during and beyond the end of the project
- Developing and maintaining longer term partnerships for transferal of project ownership

What is the purpose of a digital storytelling platform?

Digital storytelling platforms can have multiple purposes dependent on the audience and community the content is intended to reach. A platform may be created for the sole purpose of archiving local community stories for preservation purposes. Alternatively, it may provide a resource to attract and engage visitors in local storytelling, or it may be designed to achieve both. As an example, the Orkney Folklore Trail was designed with the purpose of distributing tourists to lesser known areas of the island to engage them in alternative stories and heritage.
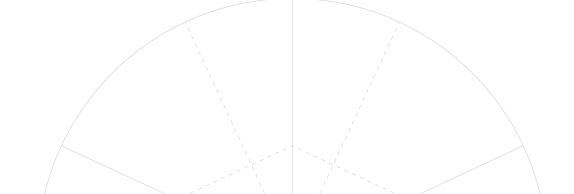
The findings from this project indicate that it is **important to understand the purpose of the project**, and the audience it intends to reach. In his talk Professor Peter Reid quoted Ina Bertrand in stating that "preservation without purpose is pointless". It is important that we understand the purpose of a project and the role of preservation if this is a significant component. This will help to navigate issues of sustainability.

How long will/ should a digital storytelling platform last?

By understanding the purpose of a digital storytelling platform it is then possible to address issues on longevity. There is no set rule for the length of time a project should last, but it's lifespan will vary depending on its relevancy and purpose.

A project designed for preservation purposes may need to consider a much longer-term lifespan for story content and delivery than a project that is designed to engage visitors with a particular theme or activity. Before embarking on the development of a digital platform it is important to consider **how long it is appropriate and feasible** to maintain the output.

The findings from this project also encourage **consideration of the lifespan or the digital platform and the story content as separate, although related, entities**. The digital platform may have a limited lifespan due to the need for ongoing maintenance, however, the story content developed may have the potential for a much longer lifespan as part of a different project or story archive.

SUSTAINABILITY

Who is involved in sustaining the project?

A wide range of stakeholders may be involved in the creation of a digital storytelling platform. This may include the project team, storytellers, local communities and organisations. However, it is also important to consider **who may be involved in sustaining the project *beyond* the collection, curation and digitisation of content**. The purpose of the project will determine who is involved in a longer-term capacity.

For projects with a commercial or tourist-based purpose commissioning an organisation to maintain the project for a period of time may be appropriate. For community-led projects greater consideration may be required to determine which individuals and organisations will play a role in sustaining the digital needs and story outputs beyond any initial funding. It may also be important to consider any training and funding needs that may be required to enable this.
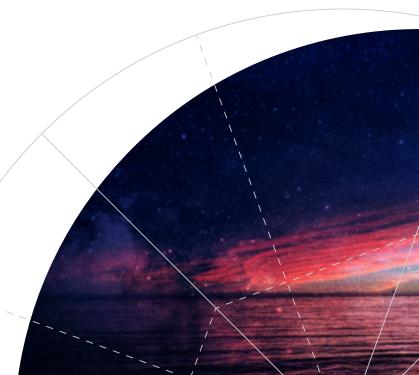
It is proposed that forming relationships with stakeholders and developing a strategy for who will be involved in sustainability is required at the start of a project. If ownership of the digital platform or story content is to be transferred in the future a formal agreement should be developed between stakeholders, and all permissions obtained across the collection, curation and digitisation stages. **Permissions may differ for the use of stories beyond the initial purpose of the project and as such it is important that any potential transfer of content is addressed.**

What resources are needed to sustain the project?

A variety of resources are required to sustain digital storytelling projects. These reach beyond technical requirements and encompass wider human and financial resources. Based on the purpose of the project it may be important to consider the different needs of audiences that the platform may reach, and the human resources required to meet these. These may include:

- Financial resources (including technical maintenance costs, hosting, human resources, promotion)

- Human resources (including time for maintenance and development, a point of contact)

- Technical resources (including URLs, expertise and knowledge to update)

- Marketing resources (to promote and engage audiences with the platform)

- Community resources (including wider 'buy in' from the community, permissions to use, preserve and potentially transfer stories)

SUSTAINABILITY

Opportunities

When considering the sustainability of digital storytelling platforms there are a number of opportunities that may be considered to enhance the longer-term viability of a platform and its story content beyond its initial purpose. The findings from this project identified severa possible avenues that may be considered to offer a more sustainable option for the future

- **Engagement with education:** the story content developed through digital storytelling projects may be packaged as a resource for schools or other educational institutions to use as part of their curriculum. In addition, colleges and Universities may provide an opportunity for sustaining digital content in the longer-term through placements and student projects.

- **Commercialisation and enterprise:** the potential to monetise story content through paid access or advertisement may provide an opportunity for future sustainability. This may be through establishment of a commercial entity or a not-for-profit social enterprise.

- **Knowledge exchange:** the process of story collection, curation and digitisation may provide an opportunity for knowledge exchange activities that can provide a legacy beyond the end of the project life cycle.

- **Collaboration:** if permissions are gained for the transfer of content collaboration with other parallel, new, or emerging projects may provide a longer-term solution for a digital platform and its stories.

Best Practice: Planning for sustainability

- Understanding the purpose of a project is integral to being able to plan for sustainability. It helps to answer further questions about who, when, and what is required to sustain the project.

  Q: What is the purpose of this platform and the stories collected?

- It is important to plan for the 'death' of the technology associated with a digital storytelling platform but not necessarily the story content. These two components of a digital story project should be planned for as separate and related parts.

  Q: If the technology dies, how can the stories live on?

- Sustainability should be a cornerstone of the initial planning stages of any digital story project. Planning for sustainability at the start of a project can help to ensure procedures are followed to ensure its longevity.

  Q: What resources will be required to sustain this digital storytelling project? And for how long?

- A digital story platform should exist and live beyond the project team. Developing a legacy handover document for after the project is completed can help to separate the project team from the output and ensure a longer-term legacy. This should plan for any potential transfer of ownership or permissions, and account for the human resource needs required to sustain the platform and its content.

  Q: How will the platform exist beyond the project team?

SUSTAINABILITY

How can a digital platform be maintained and sustained after the end of the project by a local community?

Opportunities

Engagement with education → Knowledge exchange → Commercialisation and enterprise → Collaboration

Understanding

What is the purpose?

Lifespan of project?

Who is involved?

Resources required?

Financial Human Technical Marketing Community

Planning

Identify purpose

Prepare for technological death

Resources for sustainability

Sustain for how long?

Think beyond project team

SUMMARY

DEVELOPING A DIGITAL STORYTELLING PLATFORM IN ORKNEY

How should stories be collected, curated and shared in a way that accurately represents the heritage, culture and identity of the local community?

The workshops delivered helped to identify and discuss key issues in relation to story collection and curation, digital feasibility and sustainability. In this final section we reflec on the research questions for this project and next steps for the development of a digital storytelling platform in Orkney.

A key issue that became clear throughout this project was the need to **identify the purpose of a digital storytelling platform** before embarking on the story gathering process and digital development. In Orkney, discussions with stakeholders indicated that a digital story platform would be multi-purpose in that it would likely be used by local communities as well as visitors. However, there was a clear need for a digital story platform to offer an experience for the visitor and as such the next steps in development have been considered through this lens.

The findings from this project indicate that there are several factors that should be considered to ensure that story gathering projects provide an accurate representation of the communities they represent. For the development of a platform in Orkney this will involve an evaluation of all 'angles of vision' when it comes to understanding storytelling and how best to represent the stories of a community. Most importantly, this project recognises the importance of the **relationship between the storyteller and the project**.

This should be a collaborative process where the storyteller is seen as a co-worker in the project development rather than a 'source' of content. It will require the following steps:

1. **Identify the scope and types of stories.**
   If the digital story platform is to provide a holistic view of the range of stories in Orkney then it is important that a multitude of story types are recorded and presented (for instance just some of the stories in Orkney include folklore, renewable energy, nature, people, food and drink, history, and many others). This should be a collaborative exercise with key stakeholders including the local community, organisations, and professional storytellers.

2. **Identifying who will tell these stories.**
   Authenticity is important and therefore 'who' is telling the stories of Orkney should be representative of the place and people.

3. **Confirming how stories will be told.**
   Orkney has a tradition of oral storytelling, however, other forms such as visual and written may provide engaging content. The traditional way that a story has been told should be researched to ensure that it is shared in way that is sympathetic to the heritage, culture and identity of the Orkney community.

4. **Collaborating with storytellers.**
   Stories in Orkney may come from a range of places. Many archives of stories already exist, and professional storytellers, organisations (such as the Orkneyinga Saga Centre) and events (such as the Orkney Storytelling Festival) can be excellent places to research and gather authentic stories from the islands. This should be a collaborative process between the project and storytellers. At this stage consideration should be given to the longer-term use of these stories and the permissions that will be required around ownership.

5. **Curating stories.**
   The curation of stories also needs to ensure that it is representative of the heritage, culture and identity of Orkney. In addition to understanding how particular stories will be shared (audio/ visual/ textual) it is important to understand the metadata that will make content findable. Collaborating with storytellers in Orkney will be important here. In addition, accessibility will need to be considered to ensure content is engaging and open to a range of individuals – this may require multiple formats of the same story to be produced.

SUMMARY

How can stories be presented in an engaging and experiential way through a digital platform?

In Orkney, it was identified that a location aware content management platform that could facilitate storytellers sharing stories and story-seekers finding stories would be a desirable solution. This would enable a range of storytellers to add their own story content and improve the currency and scope of the platform. Story-seekers who may be from the local community or visiting Orkney would then be able to chose story content most suited to their interests. To achieve a platform that provided engaging and experiential content it was discovered that:

1. An evaluation of end-users should take place prior to the development of a digital platform. This will provide an understanding of the who end users may be and the relationship they may form with the story content. This will help to plan for the technical and design elements of the platform.

2. It should provide a set of flexible templates that storytellers can use to upload story content. These templates should provide multi-media functionality (video/ audio/ textual/ imagery), the addition of metadata, location data (such as GPS) and the opportunity to add other relevant information. This should be a "no tech, no coding" approach providing an easy to use web application for storytellers to use without technical expertise.

3. For story-seekers, stories should be accessible on a range of devices including mobile phones and desktop computers. The platform should provide the searching of relevant content in a number of ways e.g. browsing, recommendation or searching. The ability for story-seekers to choose the stories they wish to engage with and personalise trails or story content will provide a much richer and more engaging experience for the user.

4. Additional functionality may help to engage users through the gamification of content, and the recommendation/ personalisation of content enabled through data analytics. This will allow further use of a digital platform that will appeal to a wider range of users including young people, schools, and organisations.

5. Feedback on user engagement with the platform was also considered to be important in analysing and evaluating the experience of digital storytelling. Mechanisms for providing feedback should be incorporated during the development stage and may also be linked to social media sites for engagement and promotion of the platform. Analytics may also provide a useful resource for 'unmanned' sites in Orkney to gather visitor data and information.

SUMMARY

How can a digital platform be maintained and sustained after the end of the project by a local community?

The sustainability of a digital storytelling platform in Orkney proved to be one of the key challenges in establishing its viability. Further investigation is required to identify the best possible route for sustainability; however, several key steps were established to understand the next stages in the process and develop a viable model.

1 Identifying resource requirements: this project identified a wide range of resource considerations for the sustainability of a digital storytelling platform including financial, human, technical, marketing and community resources. It is recommended that a full audit of these resources is undertaken and used as a basis to gain project funding and establish a sustainability plan.

2 Planning for the 'death of the technology': the stories that would be gathered for a digital platform in Orkney will sustain value beyond this purpose. As such, it is recommended that a strategy for separating story content and technology exists. In addition, options including the use of story content as an educational resource in Orkney or the preservation of this content in a wider archive provide pathways for longer term sustainability.

3 Engaging with stakeholders and the community: If a platform is developed by a non-commercial entity (such as University partners) it will be important to engage community stakeholders at the beginning of the project to identify potential transfer of the project and it's maintenance on completion. This process may require upskilling, the seeking of ongoing funds and identification of stakeholders who will be responsible for maintaining the platform. It is recommended that key stakeholders are identified, and a formal agreement established to ensure longer-term sustainability.

4 Developing a legacy handover document: Prior to embarking on a digital storytelling project it is recommended that a legacy handover document is created to identify potential transfer of ownership and permissions of the stories and technology, and to plan for human resource capacity after the end of the project. This should provide a clear pathway for the legacy of both the digital output and story content.

More information about My Orkney Story including videos from the workshops can be explored on the project website:

www.orkneydigitalstorytelling.com

Angle of Vision

But, John, have you seen the world, said he,
Trains and tramcars and sixty-seaters,
Cities in lands across the sea —
Giotto's tower and the dome of St. Peter's?

No, but I've seen the arc of the earth,
From the Birsay shore, like the edge of a planet,
And the lifeboat plunge through the Pentland Firth
To a cosmic tide with the men that man it.

- Robert Rendall, Shore Poems (1957)