



Digital technology – Making it work for you and your visitors

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Prepared by:

Matthew Jones
Phil Songhurst



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Introduction

From websites to smartphone apps, digital media pervade almost every aspect of our modern lives. As a result of this fast-changing technological revolution it can be hard for museums to keep up and to understand and meet changing visitor needs and expectations.

The main purposes of this paper are:

- To aid better understanding of the possibilities (and the limitations) of using digital technology within museums and heritage settings.
- Equip people to plan and deliver effective digital technology projects that engage visitors in their collections, sites, stories and their mission.

The paper explores the following key aspects of digital technology:

- the pros and cons of using different digital technology.
- use of motivational techniques / gaming to create memorable digital visitor experiences.
- the practicalities of briefing, appointing and working with digital designers to achieve successful outcomes.

Ultimately it is hoped that a deeper understanding of these key issues will help museums and other heritage professionals plan and deliver effective digital media projects that engage visitors in their collections, their stories and their missions.



1. The Pros and Cons of digital technology

“Myself and the other educators that I work with...have issues with touch screens...because the kids just zero in on them and many hands randomly poke and prod the screens...they are so focused on the screens, that they literally ignore the dinosaur exhibits towering over them”.

“Technology is attractive, and unfortunately many museums think they need to incorporate the latest, trendy technologies into their exhibits to attract more visitors (especially young) and to compete with entertainment venues”.

LinkedIn...

What do we mean by digital technology?

In the context of this paper digital technology is the delivery mechanism. By contrast, digital media refers to the content (e.g. app, audio, video). Digital technology can be further categorised as follows:

- Generative technologies – technologies that enable you and the visitor create and share digital content (e.g. social networking websites)
- Preservation technologies – technologies that aid in conserving heritage (e.g. 3D laser scanning of objects; digitisation of archives)
- Interpretive technologies – technologies that enable people to understand heritage (e.g. portable digital devices with location-specific content, touchscreens, AV)

The main focus within this paper will be on interpretive technologies.

Source: http://www.hlf.org.uk/HowToApply/goodpractice/Documents/Using_Digital_Technology_Good_Practice.pdf

There are literally thousands of examples of digital technologies, here are some of the most relevant:

- Personal, portable digital devices (e.g. smartphones, tablets, audio tour handsets)
- Touchscreens
- Projection
- Social networking websites
- Near Field Communication (NFC) / Radio Frequency Identification (RFID)
- Virtual and augmented reality



Why might you be considering using interpretive digital technology?

You might be considering use of digital technology for a number of reasons:

- To aid deeper understanding of, and appreciation for a site or a collection.
- To engage visitors in meaningful dialogue / to build relationships.
- To better meet the needs and expectations of existing audiences.
- To appeal to new and more diverse audiences (e.g. young people).
- To create a specific visitor experience (e.g. a 'wow' factor).
- To collect data (e.g. feedback, biological species survey).
- To give people a heritage experience off-site (e.g. virtual exhibition).
- To publicise a project and its activity.
- To keep up with what others are doing.

What are the positives of digital technology?

Capacity

- store and display a vast amount of information with limited space

Accessibility

- rapidly share information (e.g. social networking)
- deliver audience-specific content (e.g. foreign languages, disability provision)
- use visitors' own equipment (e.g. smartphones and tablets)
- ability to collect valuable evaluation and feedback from visitors
- ability to create appealing interactivity that engages different senses and intellectual levels

Flexibility

- easily update content to refresh exhibitions and reflect changes in collections
- share digital content across different platforms and technologies

What are the negatives of digital technology for museums?

- **Obsolescence** - technology is fast-changing and can lead to obsolescence (changing fashions and fads; hardware progression)
- **Cost** - technology can be expensive to maintain and update
- **Reliability** - technology can break down and detract from visitor experiences if poorly maintained
- **Invasiveness** - technology can distract people from engaging with the 'real world'
- **Exclusivity** - some audiences may be excluded depending on the choice of technology / media and **Limited experience** – often involving only a small number of people at a time
- **Passivity** - some technologies can be quite passive (e.g. sit and stare at a screen)
- **Inflexibility** - some digital technologies make updating difficult (proprietary versus open source)

Often the excitement and fervour surrounding new technologies can lead to them being used without thinking properly and fully about the interpretive goals and visitor experience as a whole. Whilst there are clearly great opportunities we must be careful that we don't just use technology for technology's sake.

Getting it right

Two important things to remember if you want a successful digital technology project:

- Don't use digital technology for digital technology's sake – use it only if, after assessing your aims, audience, messages and budgets – it makes sense to do so.
- Always remember that content is crucial – it is far more important to have good content than the latest technology.

Start with your aims and objectives

- What is your organisational mission, what are your aims and objectives?
- What aspirations do you have for the visitor experience?
- What are your interpretive themes, aims and objectives?
- In relation to your audience(s) you should ask: who? why? how? and where?

Practicality

Consider the following practical things:

- Availability of in-house skills and resources to create, collate, maintain and update digital content.
- Number and type of users.
- Physical and infrastructural requirements (e.g. provision of WiFi, power supply, mobile reception, ambient environment and light levels, user interface, building restrictions, relationship with other display elements).

Affordability

Consider the affordability and cost performance of investing in digital technology:

- Budget for initial investment (NB. this can easily be 30 – 50 % of the total development and fabrication budget).
- Don't forget library fees.
- Longevity of technology – what are the likely liabilities for replacement and repair? (NB. factor in an annual maintenance / replacement budget OR arrange extended cover with a supplier).
- Expensive museum grade vs cheaper shop-bought hardware – false economies?
- Licensing (e.g. fonts, hosting)

Experience

Think carefully about the kind of experience you want to create:

- Avoiding passivity by Integrating challenges, discovery trails, quizzes – interaction with physical.
- Giving people a sense of 'ownership' through engagement.
- 'Crowd sourcing' / user-generated content – contributing to knowledge base (e.g. citizen science).
- Opportunities to connect with experts (e.g. chat rooms).
- Behind the scenes.
- Genuine dialogue – v important (e.g. with Twitter, Facebook)
- Layered content.
- Layered with lo-tech and other media.

Exclusivity:

If we use a particular technology, will we be excluding some potential users and does this matter?

- Who / how many are we likely to exclude?
- Does this matter?
- How else will their needs / expectations be met?

Safety and security:

- Mediation and review procedures
(e.g. user-generated content)
- Privacy / data protection
- Back up and maintenance
- Resource implications

See Appendix 1 & 2 for a checklist of digital technology planning questions that will help you get your project right.

2. Message + Media +? = Meaning

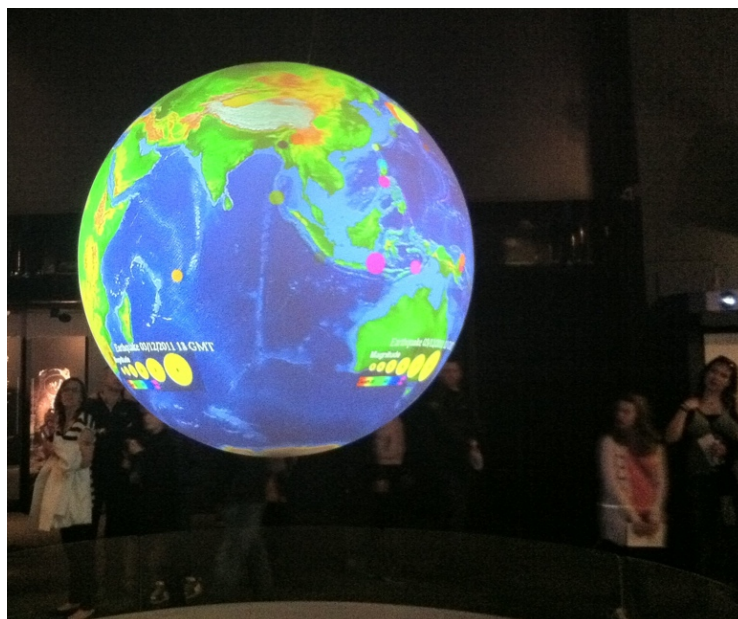
When we design and plan a particular piece of interpretation we expend a great deal of effort researching and planning the messages that we want to convey – and rightly so! Content is king we sometimes say!

We also spend time carefully considering the different mechanisms that we might use to deliver the content that we have carefully created - be it signage, leaflets, audio guides, smartphone apps etc.

Thus, we have a simple formula which states that great content (the message) delivered through a considered mechanism (media) will lead to engagement and understanding by the audience.

But, this is not always the case!

Take this piece of 'interpretation' – an exhibit in London's Science Museum.



The cleverly projected globe is intended to convey something of how patterns of energy use vary around the world. It highlights some startling contrasts and visually represents these using different sized circles.

However, when listening in on visitors' conversations as they stand around admiring the exhibit you hear comments like:

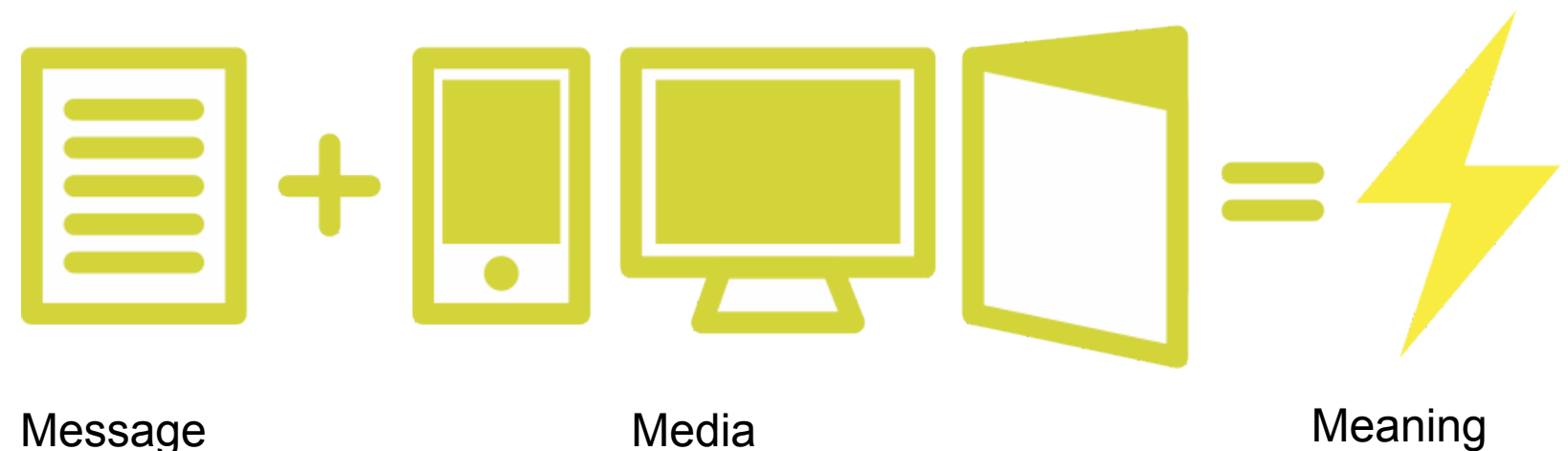
"Wow, I want one of those in my bedroom!"

"I wonder how they projected that onto a globe?"

"Gosh, how much did that cost?"

Comments such as these suggest that in the case of this exhibit the formula Message + Media = Meaning doesn't necessarily work. In other words, it seems that despite the clever and eye catching technology visitors (at least not the ones encountered on that visit to the Science Museum) are not engaging with the exhibit in the right way.

What's going on?



Motivation – the missing X factor

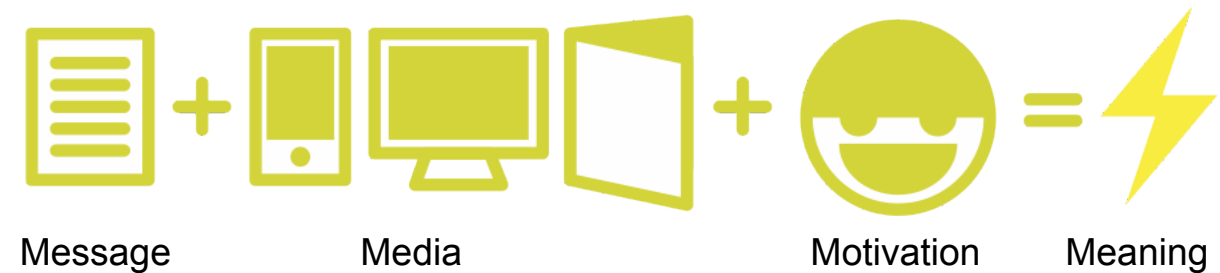
In the example from the Science Museum, and perhaps in many other cases we can bring to mind, there is often an important missing ingredient. This might be summed up in a single word - MOTIVATION!

Fun is one motivating factor by which people can be persuaded to do things, but it's not the only one.

If we look to psychology and advertising we can discover a great deal about a variety of motivational techniques – techniques which can help us when we are looking to plan and design innovative and accessible interpretation!!

Here are three 'motivational techniques' besides fun...


- **Framing** – the way that issues and information are presented (or framed) can alter our judgment and affect decisions. The example someone is more likely to donate if the 'call to action' is framed to suggest that a monthly pledge might cost "less than a cup of coffee a day" (as opposed to "30 Krona a month") or whatever the equivalent is.
- **Limited duration** – you've see it in the shops - 'offer for a limited time only'. The research suggests that given a choice between action and inaction, a limited time to respond increases the likelihood that people will act.
- **Humour** – if something is funny it is more easily enjoyed and remembered. We see this a lot through advertising in particular.



Framing

— PERSUASION / MEMORY / COMPREHENSION —

The way in which issues and data are stated can alter our judgement and affect decisions.



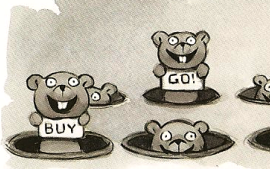
How are you presenting choices in your interpretation? Are the available options? An implied choice can make the most desirable choice more obvious or difficult concepts. For example, a monthly pledge as costing "less than a cup of coffee a day" might encourage people to rationalize a monthly pledge.

See also: **Conceptual Metaphor, Storytelling**

Limited Duration

— PERSUASION —

Given a choice between action and inaction, a limited time to respond increases the likelihood that people will participate.




While commonly used to promote purchases, limited durations can also be used to encourage specific behaviors. Set limited times when certain actions can be taken. Make rewards available at specific times. Have options that disappear if no action is taken within a specific period of time.

See also: **Periodic Events, Loss Aversion, Rewards, Achievements, Feedback Loops, Scarcity**

Humor Effect

— MEMORY / ATTENTION / PERSUASION —

Humorous items are more easily remembered—and enjoyed!.



Why so serious? Almost any text is an opportunity to add humor. But don't stop there; think about interactions and how they can be made humorous. Just as humor is injected into conversation, we can easily add humor to hover actions, button clicks, three-step processes and other user actions. In learning contexts, use humor to ease new knowledge acquisition and retention.

See also: **Affect Heuristic, Peak-End Rule, Surprise, Delighters**

And here are three further techniques which we have been looking to integrate within our interpretive planning and designing...

- **Collecting** – those of us with children will know that the desire to collect can start at an early age! In fact, for many it never stops!
- **Status** – again, right from an early age we have this irresistible urge to want to ‘do better’ than our peers; to compare our performances.
- **Challenge** – most people relish a challenge, provided that the challenge is neither overwhelming nor boring.

In short, there is a word which sums up a lot of these forms of motivation... GAMING!

Gaming is big business and since the advent and massive growth of ‘apps’ on all platforms, it has become completely pervasive within our cultures. Social media networks, such as Facebook, have realised the power of gaming too with their many online challenges and games!

Whilst the big, 3D wow graphic games are still popular; there has been a staggering growth in simpler, fun, ‘quick challenge’ type games.

People are very motivated to play games and the motivational techniques behind them can be used to encourage people to engage with our natural and cultural heritage sites.

So, how can these motivating factors and the idea of gaming help create innovative and accessible interpretation?

Case study: Chester Portico Project.

This project partnered the city of Chester (in England) with the historic cities of Cologne (Germany), Ghent (Belgium) and Utrecht (the Netherlands) to demonstrate best practice in the use of archaeology for tourism and economic development.

We were involved from the outset in planning and designing a complete scheme, including: on-site interpretation boards; waymarking; public art; literature and a comprehensive Walls Quest smartphone app for Android and iOS!

The Walls Quest app incorporates a number of motivational gaming elements – collecting, challenges and status-related features such as an online leaders’ scoreboard and levels of achievement.

The app is essentially based around a circular tour of Chester’s city walls. It contains a number of points of interest which can be seen on a map or in a list view. At each point you can listen to audio content, watch videos, view reconstruction illustrations and read interpretive captions or browse more deeply if you are interested. So, on one level it is like an interactive guide book.

BUT

If you choose to do the Walls Quest Challenge, there is another whole layer of interaction - a chance to carry out quests, earn points and collect shields and rewards...

Features of the app:

- Competing in Quest Challenges gains the player points which can be compared to others playing on the walls.
- Introducing the element of competition increases the chance of people going further and completing the 2-3 hour circuit of the Walls.
- More points helps the player gain a higher status level – Apprentice, Journeyman, Master. Introducing status allows people to assess their level compared to their peer group.
- Completing multiple Quest Challenges unlocks Guild Shields. These are collectable and research shows people like to amass units that add to or complete a set.
- The challenges encourage people to interact with and observe features and details associated with the walls as they explore. They are also linked to the on-site interpretation – i.e. ‘read the panel at X and find out who destroyed the city walls in the year 1150’.



Case study: I Tweet Dead People (Ivory Bangle Lady)

This was actually a pilot project funded by REACT (Research and Enterprise in Arts and Creative Technology) through the Heritage Sandbox programme. Its focus was to develop an innovative and accessible approach to interpreting human remains within a museum setting.

The Ivory Bangle Lady was actually a wealthy Roman-period inhabitant of the city of York and her remains were discovered, along with lots of interesting grave goods in the 1900s. Over the decades she has been the subject of a huge amount of archaeological research.

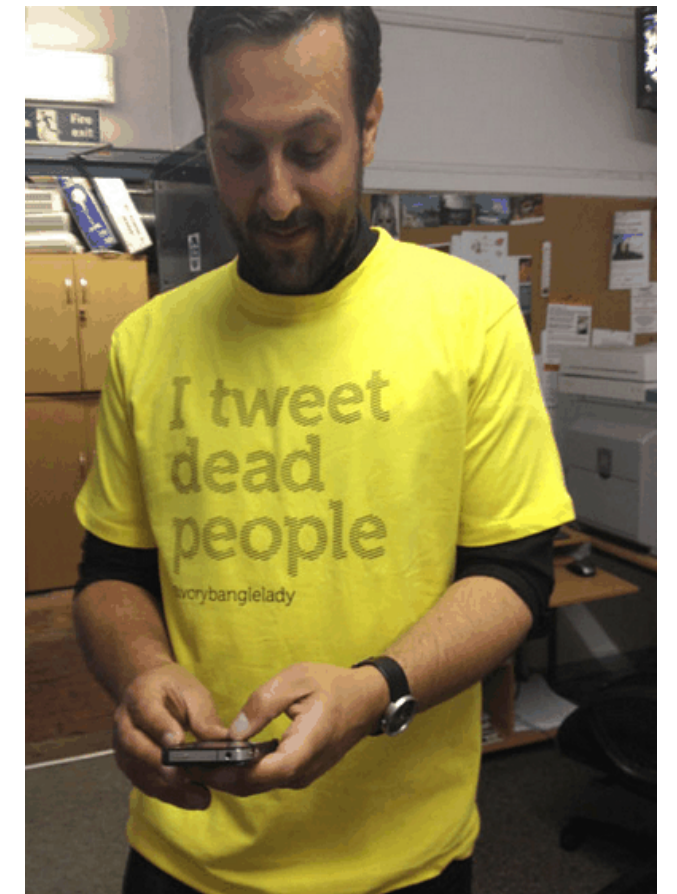
The central challenge of the project was to break the mould of how human remains are usually interpreted and enhance peoples' museum experience.

Features of the project:

- Integrated use of media – AV, digital mobile technology, graphics and literature.
- Novel application of Twitter and Texting through their use as triggers for revealing AV content.
- Creation of a discovery trail with puzzles and riddles to solve. Appeal for younger audiences through use of familiar technology.
- An attractively branded style with a distinctive look and feel.

For further information follow this link:

<http://www.react-hub.org.uk/heritagesandbox/projects/2012/the-ivory-bangle-lady/>



“The children loved the technology, it really engaged them. They would have improved the trail by making it longer!”

“I thought it was a really cool way to make an exhibit interesting and to get the major points across very clearly. Really enjoyed it!”

Quotes from participants during the evaluation.

3. A good brief means no grief: selecting and briefing digital designers

Get the procurement strategy right

Before you prepare a brief, make sure you have the right procurement strategy. In the United Kingdom, procurement in the public sector is governed by a set of rules designed to encourage fair competition and a transparent process. Any contract over around £170,000 also has to be procured under EU rules and regulations, and be openly advertised to companies across Europe.

You should consider whether to have an openly advertised tender, or a restricted invitation to tender that you just send to a few companies.

You should consider whether to have a 'PQQ' stage for you to shortlist 4-6 designers to invite to full tender. Also decide whether it will be a 'design and build' contract or a 'design and manage' contract.

'Design and build' or 'design and manage'?

With a 'design and build' contract, the designer has complete responsibility for designing and delivering the exhibition. They contract all the suppliers (e.g. fabricators, film-makers, AV equipment, digital programmers etc.), making it much simpler for you. They are also responsible for all the warranties.

What to put in your brief

Instructions on the tendering procedure

- A realistic tender timetable (at least 3-4 weeks) for designers to respond
- A client contact (you?) who can answer any questions or meet prospective designers
- Instructions on the tender process, how many copies of tenders are needed, and in what format
- Whether a creative response and concept designs are required
- Details of any tender design fees available i.e. to pay for concept designs (which cost a lot to create)
- A tendering timetable (date for return, date of interview, date of appointment)
- Your tender evaluation criteria

Background and context

- Description of your project
- Interpretive aims and themes, plus information about the significance and interest of the site or collection
- A summary of your target audiences
- Information about the quality of the visitor experience you want to deliver.
- Details on any evaluation of existing or previous interpretation
- Details on any consultation that will be required
- Other professionals the designer will need to work with e.g. architect, artist, M&E designer etc.
- Details of who will manage the designer
- The project programme and a realistic date for completion - good design takes time so give yourself as much time as you can!

Content and design instructions

- Any information about your brand or identity. NB creating or developing your brand might be part of the brief
- Further information about your themes and topics
- Information on your collection and any objects or groups of objects that will be on display
- Any specific media requirements (e.g. if digital media should be included in the scheme, e.g. website design)
- Any language requirements (e.g. will the exhibition will be in your native language and a foreign language)
- What content resources you will be able to supply (e.g. copy, images, film, video, computer simulations, etc)

Budget information

- Your procurement strategy will determine whether you tell the prospective designers what your budget is. There are advantages and disadvantages of including a budget. We recommend that giving a fixed or guideline budget will help designers to tender.
- Be clear about the remit of the contract and budget, e.g. if it's a 'design and build' or a 'design and manage' contract
- If a design and build contract, either ask for details of any supplier mark-up, or indicate what the designer can charge (e.g. 10%)
- Ask for the designer's fee breakdown by design stage, so you can see where the money is being spent
- Ask for details of VAT or any other taxes to be shown separately
- Include any details about the payment plan, e.g. if the designer will be paid their fees in stages

What information to ask for

Ask the designer to provide the following information in their tender return:

- Creative response
- Methodology
- Team members and CVs
- Previous examples for their work
- Awards or accreditations
- 3 referees
- Their project management procedures
- Insurance details
- Financial status (for larger contracts)

Supporting information

Please also supply with your brief:

- Your Interpretation Plan
- Architects drawings including floor plans and elevations
- Any brand design guidelines
- Site plans and photos
- Links to any on-line references

Shortlisting, interviewing and appointment

- Use your tender evaluation criteria to shortlist at least 3 designers to invite to interview.
- To achieve best value, we recommend your criteria should be 70-80% quality and 20-30% cost (i.e. don't accept the lowest price!)
- Use the interview to meet the designers, see what they would be like to work with, and to hear about their response to your brief. We would usually expect an interview to last 1hr and include a presentation and time for questions
- Try to make a decision as soon as you can and let all shortlisted candidates know.

Conclusion

- Spend time to ensure your procurement strategy and brief are full and correct.
- Make sure your brief is as detailed as it needs to be. A larger project will usually require a more detailed brief.
- Have a plan and realistic timeline for the tendering and appointment.
- Get this stage right and the project will be easier and more successful to deliver.

4. Step by Step – making your digital project a reality

In this section consideration is given to:

- the four basic steps involved in design, development and delivery of digital technology projects.
- work flow timing and sequencing issues that might impact on digital technology projects
- how digital technology can and should work in an integrated way with other interpretive methods

From a stand alone digital project to a whole new exhibition the design and development process can basically be summarised in four BASIC steps:

- Step 1: Define application objectives
- Step 2: Design the application
- Step 3: Develop the application
- Step 4: Test and approve the application

Of course real life is more complex and there are numerous tasks within each step, but this is a helpful way of remembering the importance of:

- setting objectives and being clear on what you want the application to achieve with a list of key features and functionalities (after all you wouldn't design a car without specifying that it must have wheels and be able to go from A to B... and the rest!).

- making decisions about the look and feel and how this relates to existing exhibition style, physical setting, target users, organisational brand image etc.
- thinking about the process of working together with externally (digital designers) and internally to develop the application – not just in terms of programming, but also content development – e.g. copy writing, filming, illustration, sourcing archive imagery, making audio recordings.
- making sure that allowances are made to test the application (preferably with target audiences) to ensure that it meets your objectives through a defined approvals process.

Step 1: Define application objectives

Taking the first of our 4 steps – defining the objectives for the application – there are really two main aspects to this – the first being '**research**' and the second being '**the brief**'.

Research & Brief

- What does your audience tell you?
- What does your interpretive planning tell you?
- What materials and background reading are available to help tell your story?
- How can this information be helpful in formulating the brief?

The most crucial part of defining your objectives is background research.

Ideally research should begin well in advance of putting together a brief for a designer.

There are really a couple of aspects of research – one being the subject matter, the other being the audience.

Anything you are able to substantiate (through survey, visitor observation, focus groups etc.) about the visitor experience that you're currently offering or that you are thinking of developing will be invaluable in guiding the design development process and will help define clear objectives.

Making even a small selection of your research material available with the brief will help designers respond in a more informed manner and give you a more meaningful set of responses to your tenders.

Of course the research process doesn't end with the written brief – for the designers the research process really gets under way as a critical first step of their involvement with your project once they have been commissioned.

It is important to realise that when you bring a digital designer on board there are two areas of expertise coming together.

On the side of the commissioning organisation there is expertise about the subject; the collections and hopefully the audience.

On the other side is the designer with their technical and creative expertise.

The earliest stages of your project should involve a constructive dialogue to help refine and if necessary develop your initial objectives. It is important not to be too protective about your initial ideas so that the digital designer has scope to contribute their expertise and advice.

Equally, it is imperative that your digital designer becomes fully acquainted with whatever research you have available.

Step 2: Design

Design outputs

- Look and feel
- Functionality
- Costs
- Specifications
- Value engineering

The second big step in our sequence of four focuses on design and incorporates the following key elements:

- agreeing the look and feel and user functionality of the digital technology.
- discussions and agreement on costs and equipment specifications.
- value engineering (i.e. consideration of different ways of accomplishing your objectives using different forms of digital technology. But it might also mean considering a lo-tech approach instead of a hi-tech one.

Design process

- Written concept note produced
- Wireframes
- Sample designs / graphics
- Consultation and comment (internal, external)
- Revisions to wireframe, concept designs and concept note
- Client approval

Step 2 typically involves a flow of tasks shared between you (the commissioning organisation) and the designer you have brought in to help with your project.

- The first task is the creation of a **written concept note** (see more in next section). The written concept note is an evolving document. It should be refined as you engage in dialogue with the designer. It will be invaluable when it comes to thinking about evaluating the outcomes of your project.
- Another crucial task is the production of ‘**wireframes**’. These are intended to show the basic mechanics, functionality and sequences for content development. They might be used, for example, to demonstrate the interactions for a game or to explain the navigation of a website.
- Development of **concept designs** to show what the application will look like.
- An opportunity for **consultation** and commenting – ideally this will involve the audiences for whom the digital technology is intended.
- Wireframes, concept designs and written concept note are revised in line with any comments leading finally to approval.

The **written concept note** is the first major output in the design process. It doesn’t really matter what this document is called or what format it is in or what it looks like; what is important is that your designer works with you to clearly demonstrate the rationale and design intent for the digital project.

It should therefore provide the following key bits of information:

- **Design rationale** – what is the overall thinking behind how this project looks, feels and operates?
- **Interpretive aims, objectives and themes** – what will the experience contribute to specific interpretive objectives and how will the story be communicated?
- **Target audience(s)** – who exactly is the target audience?
- **Descriptions of spaces / exhibition items** – how does this element fit as part of the bigger scheme?
- **Content requirements** – what are we likely to need to develop the content for this (e.g. library images, new film footage, oral history recordings)
- **Descriptions of technology** choices – what specific types of technology are proposed (e.g. lo-tech, high tech)?
- **Outline costing and equipment specifications** – what are the key features and requirements of the proposed exhibit item?
- **Floor plan** – how does the item relate spatially to other elements of the exhibition and the visitor route?

Where relevant consideration should also be given to:

- **Number of players** – how many people can interact with the exhibit at any one time?
- **End goal** – what is the specific end result of the game or challenge?
- **Duration / holding time** – how long it is expected to hold the attention of the user?

Wireframes

Having consulted the client on the written concept note and undertaken some revisions in response to their comments wireframes are developed.

These provide a simple and user testable framework for evaluating visitor interactions, navigation, gameplay and screen flow.

Concept designs

Concept designs provide example styles of the graphics and illustrative content for user evaluation and to ensure design consistency with other project elements.

Step 3: Develop the application

This step involves the following:

- content development
- filming / recording
- software programming
- detailed design and build

Content development involves gathering together existing or producing new digital media, references and resource materials. It might involve filming, audio recording, as well as sourcing images and producing copy.

Software programming and detailed design and build of any digital interactives may proceed at the same time. It is worth thinking carefully about your requirements

Step 4: Test and approve the application

The final step is to test the application in its beta form to iron out any problems. It is important to allow sufficient time and budget for this process.

Appendix 1: Key Project Planning Criteria CHECKLIST 1

User and user experience...

- Who are you hoping to engage by using this technology?
- Do you have evidence that it will work for this audience?
- Will the technology exclude some people from using it? Does this matter?
- What will the experience be like for those who are not able to use the technology?
- How else could visitors' needs and expectations be met? Is there a lo-tech alternative?
- Can you use any motivational methods to ensure that the experience is not 'passive'?
- Is the user experience intuitive and easy to learn in a short time period?
- Have you thought 'in-depth' about how the whole user experience works – i.e. the way that people are expected to interact and use the technology and how this relates to the environment that you are placing the technology into?
- If you are considering using social media or user generated content – how can you ensure that you engage in meaningful dialogue with the public?

Skills and resources

- Do you have the necessary in-house skills / resources to develop the content (e.g. writing a brief, writing scripts, formatting images, recording audio, updating web pages)?
- What skills will you need to 'bring in' to make the digital technology project happen?
- Have you got the necessary infrastructure to support the technology (e.g. wireless internet access; electrical supply; central server facility)?

Context and setting

- Are there any environmental constraints which would make using of the technology impractical (e.g. lack of space; too light; too dark; too humid; quiet; competing noise; conservation issues)?

Evaluation

- How do you plan to evaluate the success of the digital technology project?
- What will you do plan to do with the information from your evaluation?

Costs

- What will it cost to develop the necessary infrastructure if you don't already have it in place?
- Have you budgeted for the costs of upgrade and repair?
- Will there be any licensing and library fees associated with developing the content (e.g. images, sounds, music, software licensing)?

Safety and security

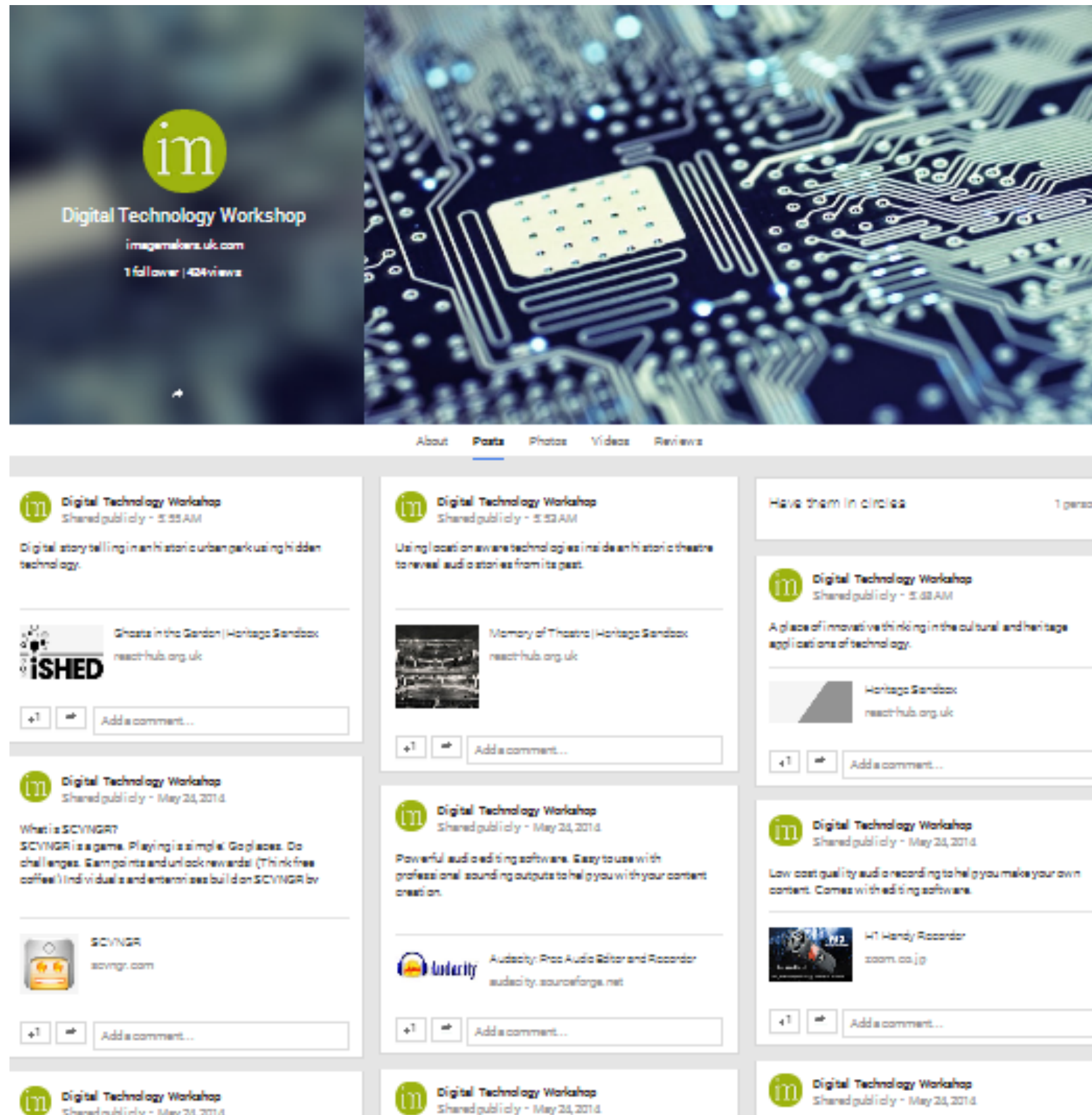
- Have you thought about how you will keep your data safe and secure?

Checklist of project planning questions

- Do you know why you want to use digital technology?
- Can you set out how it will help you achieve your aims?
- Will you be creating any digital outputs? If so, what will they be?
- Which file formats will you use and why have you selected them over others?
- What's the optimum 'quality' to ensure your digital outputs are fit-for-purpose?
- How will you make sure digital outputs are fit for their intended purpose?
- What metadata will you create and how will this be kept?
- When will this metadata be created and who will be creating it?
- Does copyright legislation apply to your digital outputs? If so, how will you make sure rights are in place to allow digital files to be created, used and preserved?
- What type(s) of hardware will you use to store your digital files?
- What type(s) of software will you use to store your digital files?
- How will people access your digital outputs and engage with them?
- Do you ultimately intend to deposit your outputs with a third party organisation?
- How will you know if your project has been successful?
- Have you costed all aspects of your project?
- Who will have ultimate responsibility for following good digital practice?

Source: http://www.hlf.org.uk/HowToApply/goodpractice/Documents/Using_Digital_Technology_Good_Practice.pdf

Appendix 3: Online digital technology resource



<http://tinyurl.com/q5pr9fn>