### Museums & Galleries of NSW



Engaging Art Digital Engagement: Connecting With Your Audience

# A guide to implementing a digital project

This guide is intended for anyone planning to use digital technologies to enhance the galley or museum experience and needing to engage external resources/contractors to do so.

A digital project is about audience and community engagement through the creation of interactive storytelling, immersive environments and broader transmedia experiences.

There are several basic steps in the development of a digital project.

- The brief
- Find a digital company or developer
- Use your brief as the initial 'conversation'
- Work through the brief with your developer
- Formalise the project
- Run the project
- Sign-off

## The brief

Your brief is a very important document for both you and the developer. The brief will help you better explore and visualise your prospective digital project. It allows you to track the evolution of your project and inform the developers. The brief can be as detailed as you want. Typically, it will be to the point and not overly wordy. The use of images, flow-charts or bullet points can be helpful. Your brief should detail the following at a minimum.

#### What is the project?

This is not about the digital component as much as is it is about what the content is and why you are exploring a digital pathway. It should detail the ethos behind the project and overall importance of the project to you and your intended audience. For ideas on how to generate ideas and develop a digital project for your organisation see our guide here Design Approaches to Digital Projects – A Beginners Guide: https://mgnsw.org.au/sector/ resources/online- resources/digital/design-approaches/

#### What is the content?

This important section provides non-GLAM developers with an understanding of the content and its importance to you and your audiences. A good succinct description of your content and its associated information will ultimately guide what approach (and therefore cost) the digital project will take.

How you envisage your content being presented relies on the descriptions provided. For example, if the aim of your application is to display a woven fibre mat in its entirety with associated information, there is very little point in employing millimetre accuracy scanning (very expensive) to capture it. A better solution would be to photograph the mat and present it as a touch-table or mobile application that allows access to important descriptive information through engaging interactivity.

This section of your brief should be as clear as possible. It is important to know where the content is housed, what format it will be delivered in, and who will be responsible for this part. You may need to consider additional costs in converting your content to a digital format if it cannot be done in-house. If physical access to your collection is required, you will need to mention this in your brief.

#### Is the project a one-off or will it be ongoing?

This is a critical part of your brief that needs to be defined from the outset. Generally, a one-off project can be delivered quickly but longevity can be an issue. For example, a one-off interactive mobile game centred around an exhibition will have a lower life expectancy to an interactive application that describes a universal process or object. Conversely, a digital project that can be updated will have higher user engagement over time, but may be more expensive to develop. Additionally, ongoing projects will have considerations surrounding staffing and resourcing as well as ongoing fees.

Ongoing projects will generally also require back-end development for the client to update the project or you will need to rely on external agencies to carry out this task.

#### Who are the stakeholders?

It is important to detail the stakeholders (artists, curators, audiences etc.) in your brief. This allows your developers to better understand the needs, requirements and scope of your project. List your stakeholders in order of importance to you and provide a very brief description of each where possible. Your target audience will, to a large extent, determine your method of delivery. Are you looking for a mobile application that will help your audiences better use your physical spaces, or are you looking at engaging ways for audiences to access your collections?

## What is your vision and reason for employing digital technology?

This is where you can broadly describe your vision for a digital project and why. Unless you are sure of the technologies you want to use and why, there is no need to be specific. Your brief can be an exploratory document that leaves the option for several different approaches. You can include examples from other organisations, websites or apps, anything that helps make your vision clearer to yourself and the developer.

It is the role of a good developer to understand the project and offer a range of possibilities and the pros and cons of each. Remember, the developer should understand the technologies and propose the appropriate one for your vision. Your vision should also clearly articulate your envisaged method of delivery. Is this an in-house touchtable application, a mobile application or a web-based application?



Photo by CoWomen on Unsplash

A final point: be prepared for your initial vision to look very different when finally realised. This is okay if the initial broad outcomes of audience engagement, education etc are realised. In short, be flexible and open to ideas you had not considered.

#### What are your timeframes?

This is important as it will guide the pace of the development. Having a clear goal in terms of a launch will be critical to an on-time delivery and will formalise the process.

#### Identify your resources

It is important to identify your resources in your brief. Resources include **content** and **available personnel**. Explore what internal resources can be utilised to minimise the cost of development. For example, an in-house photographer can photograph objects for use in the development of 3D objects. This will save on an external photographer, special collection access, travel times etc. A critical resource you should consider is marketing. If you have in-house marketing, it should be utilised from the outset of the project to generate interest. If there are no in-house services, external resources should be factored in.

The success of many digital projects relies on the ability to successfully market your project through social media and other digital channels.

# Find a digital company or developer

This can be a difficult part of starting a digital project when internal resources are not available. There are very few companies or developers that specialise in the GLAM sector. As such, you will be generally choosing from a pool of developers that work across a broad range of industries. Below are several tips and pointers that will help you to choose the right fit for your project.

**Look at work done by prospective candidates.** This may not be anything related to your industry, but you should be able to look at it and see possibilities in your own area. Most developers/companies will have a portfolio that you can browse.

**Make contact** with prospective companies via phone or email and give them your brief. Provide some background information where possible to help the developer connect with you before exploring the brief.

**Ask them to evaluate the brief** and come back to you with possible ideas, criticisms and alternatives. This will tell you how willing they are to explore your project. A serious developer with little GLAM experience will do the research and see what else is being done and where. A developer that does not provide constructive feedback and new ideas will most likely not be the right fit for your

project. A developer should be able to point out any issues in your brief and suggest better options.

The GLAM sector is very specific and developers new to the industry are often required to undergo a steep learning curve to understand your content and context. A willingness to do so is a good sign of future collaboration.

**Ask for references** from past clients where possible. If a developer cannot, or will not, provide references you should be wary. A satisfied client will generally have no problem providing a written or verbal reference.

**Have an initial meeting** with prospective developers. In this meeting you are not only looking to explore ideas, costs etc. but also to see how engaged they are with your content and the possibilities. The developer should be very focused not only on the content and project but the intended audience.

If you have a specific target audience in mind, explore what experience the developers have with these audiences and what efforts they will make to understand them. Different demographics have different needs. For example, younger audiences are generally engaged by interactive applications and games whilst senior audiences are more comfortable with web-style interfaces and slower paced browsing.

No digital project will be successful if the developers are not making a genuine effort to understand the intended audience!

# Use your brief as the initial 'conversation'

Your brief is the key to the entire project. The more clearly defined it is in terms of what you are seeking to do and why, the better. Your brief will make clear what level of digital experience you have. The brief is about the vision not the technical side of things.

Use the brief to describe your content, the audiences you are targeting and why you are doing so. This provides a framework for ideas to be explored. The important thing here is that you keep sight of your goals regardless of what is proposed!

## Your primary question should always be: How effectively does this idea/application address my goals and why?

There is no point in developing a high-end 3D game style environment that excludes some section of your audience when the project can be delivered as a simple engaging touch-table or mobile style interactive application.

The initial conversation should be all about ideas and possibilities. At this stage there should be no discussion of costs. Use the initial discussions to develop ideas and begin to form concrete ideas.



Photo by CoWomen on Unsplash

# Work through the brief with your developer

Once you are at a point with the developer where solid ideas are coming together you can begin to discuss costs. It is useful at this point to look at project costs before you go too far. An idea may be perfect but cost-prohibitive; however there are always viable alternatives.

This is really where you begin to weigh up options and possibly change the overall scope of the project. The key point to remember is how the proposed application addresses your goals. You may be able to break the project up into smaller chunks over time or deliver it in a way that was not initially envisaged, but still addresses your goals.

During discussions always remember that this is your project and your goals. This will assist in maintaining the reigns of the project throughout its life. If your budget does not support a high-end solution, look for an innovative low-end solution that does. If your developer cannot engage you at this level, you should look elsewhere.

## Formalise the project

By the time you are ready to start the project you should have a clear understanding of what is going to be developed. Your initial discussions with the developer should have led to a proposal that clearly lays out the solutions that you have collectively arrived at. The proposal should include:

- Description of the services provided
- Schedules (milestones and deliverables)
- Responsibilities of all parties
- Support what level servicing/troubleshooting assistance and for how long?
- Any agreed additional services such as mobile app analytics, training etc.



- Agreed fees for out-of-scope additions
- A quotation with cost breakdowns including annual maintenance fees (if any).

At this stage the project should be formalised if you are happy with the proposal and supplied quotation.

At a minimum, a Heads of Terms (https://mgnsw.org. au/wp-content/uploads/2019/06/EXAMPLE-TEMPLATE-HEADS-OF-TERMS.docx) should be drawn up and signed by both parties. The document should clearly lay out the deliverables, the responsibilities of the parties, the payment schedule and the timelines including milestones.

Final points for formalising your digital project:

**Protect your Intellectual Property** – Be sure to properly protect your IP. Always specify in your contract that all material provided and any new material that is created as a result of your content remains your Intellectual Property.

**Insist on regular updates** – regular communication is essential for you to maintain overall control of your project.



ThislsEngineering RAEng on Unsplash

**Insist on regular testing cycles** – It is much better to build in chunks and test rather than to build everything and then test. Your project will develop quicker and with less errors. You do not want to get to the end of the project only to find it does not deliver as intended, or worst, does not work at all.

**Be the tester** – Most decent contractor/developers will conduct in-house testing, but you should be actively involved in this process. Insist on development updates that you and your team can test. You will learn more about your app by doing so.

**Stick to delivery and milestone dates** – Make sure that you deliver content on-time and in the agreed format. Doing so shows the developer that you are serious about the timelines and the project itself.

## Run the project

This is essentially all about meeting timelines and constant communication. Keep regular contact with your developer. Talk to them about issues as they come up. By taking the initiative on the project the developers are more likely to meet deadlines and maintain an open channel of communication. Ask questions! If you are not clear on any part of the project, ask questions until you are.

It is important to be talking to your developers in the days/ week leading up to a milestone or deliverable. Project overruns can be a reality and usually all that is required is an adjustment of the timelines and payment schedules. However, if additional content or functionality is not an issue there is no reason the project should not meet deadlines. Better to be aware of an issue than to find out on the day that a milestone has not been met.

## Sign-off

The sign-off is equally as important as running the project. This is time where you are releasing your project to the world and the time that the developers cease to work on it. Before you sign-off on the project you should:

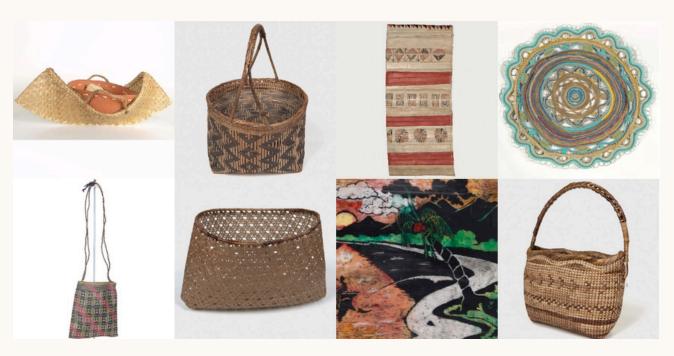
- Be satisfied that adequate stress testing has been conducted across all the platforms your projects will be delivered on.
- Be satisfied that the application, at a bare minimum, does everything that was agreed to.
- Be satisfied that the app has been successfully deployed and ready for release (in-house touch-table installation, on the organisations website, on the Playstore/AppStore for download etc.)
- Be satisfied that any required training has been undertaken.
- Be satisfied that any agreed upon support services are in place.
- Be satisfied that adequate marketing has been undertaken to raise audience awareness prior to launch.

If any of the conditions above are not met, you should really consider delaying the release until they are resolved.

Have a launch! – This is always a good way to raise public awareness and is a good symbolic sign-off for you and the developers.

## Have a launch!

This is always a good way to raise public awareness and is a good symbolic sign-off for you and the developers.



# Case Study The 'Women's Wealth' project by QAGOMA

## The Brief

### What was the project?

The 'Women's Wealth' project, featured in The 9th Asia Pacific Triennialof Contemporary Art – a collaboration between the Queensland Art Gallery | Gallery of Modern Art (QAGOMA) and three Buka women: co-curator Sana Balai and artists Taloi and Marilyn Havini.

The dedicated Women's Wealth website extends the public engagement aspect of this project beyond the physical space.

### What was the content?

A diverse range of artworks. In total the exhibition contains 154 works including 93 3D objects. Each artwork had associated text content that could be presented giving more information about it.

### Artworks included:

- Traditional 2D artworks
- Multichannel and Single Channel video
- · Woven objects
- Pottery
- Jewellery

A detailed list of the content (including photographs and descriptive information) was provided to allow the developer to assess the most effective technology to use and to evaluate the costs involved.

### Who were the stakeholders?

QAGOMA and three co-curators Sana Balai and Taloi and Marilyn Havini, the communities from which the work derived and the general exhibition audience as well as a wider interested public who could gain access online.

## What was the vision and reasons for employing digital technology?

The digital project was inspired by a need to engage the broader source communities with the experience of the exhibition and their culture that would otherwise be inaccessible to them. In particular, the project focused 'on what contemporary art can mean for women living in villages in Bougainville and the Solomon Islands'.

## Meeting the developer

QAGOMA held initial meetings with Ortelia and worked through the brief, formalising the project, setting project deliverables, milestones and designing the interface.

Project deliverables included an Interactive web-based 3D virtual tour and photographic panoramic tour.

Home insert	Draw Page Layout	Formulas	Data	Berley	View	Developer Help Foxt PDF	AlAdworks_Fires					Lazaros Kastanis	표 – đ 남Share Conge
H N	I P	M	A	R	W	1 11 12							
K Cur La Copy -	Arial • 10 • A	· ^ 🗐	= = *	>- 35	Wrap Text		🖬 🔛 Norn		Go	d	Neutral Calculation	▶ → → → → → → → → → → → → → → → → → → →	
Sormat Painter	в ГЦ = 🖂 = 🖄 = .	<u>A</u> - =	= =		Merge & Cen	ter + \$ + % \$  58 -40 Conc Form	itional Formatias	Explanator	y Inp	ut	Linked Cell Note	The Insert Delete Format	Sort & Find & Filter= Select=
Clipboard IS	Font	15		Alignment		G Number G			Styles			Cells Edi	ting
* : ×	J & 1119.2018												
A B	с	D	F	F	6	н	1		к	1	м	N	0
mber Medium	Title	Height		Depth	Year	Description	Artist	Secondary Artists	Birth	Death	Language Group/Region	Filename	Map Reference
747.2018 2D	Untitled (children in village)	15	5 21		201:	Synthetic polymer psint on myter Collection of the International Committee of the Red Cross (ICRC) Papua New Guinea and PNG Red Cross Society	RONALD DISSING				Autonomous Region of Bougainville	DISSIG_Unbilled_747.2018_ICRC_001.jpg	
817.2018 2D	Mat: A place to share		146		201	yunngaire (reed), pandanus, wool, cotton yam, rafta, red mullet scales, sea ropes / Courtesy. The artist and Onespace Gallery, Brisbane	ELISA JANE CARMICHAEL		1987		Ngughi clan, Quandamooka people Australia		(-27.5323174, 153.4626077)
828.2018 2D	(Man with Upe)	57.5	5 30.4	1	197.	Pen and fibre tipped pen on paper Collection: Marilyn Frances Havini, Buka Island, Autonomous Region of Boucainville	GREGORY DAUSI MOAH		1911	1988	Solos languaga group Autonomous Region of Bougainville	MOAHgregory_ManWithUpe_828.2018_001.jpg	(-5.237526, 154.6154
829.2018 2D	(Tsuhana and feast)	30.6	5 76		197.	Pen and fibre tipped pen on paperCollection: Marilyn Frances Havini, Buka Island, Autonomous Recion of Bouganvile	GREGORY DAUSI MOAH		1911		Solos language group Autonomous Region of Bougainville	MOAHgregory_TsuansAndForest_829.2018_001.jp	g (-5.237526, 154.6154
833.2018 3D	Sinsu	92	2 40	1.2	201	Pandanus, hakolu (red noni root dye) and hakin (wild banana bark) Purchased 2018. Queensland Art Gallery   Gallery of Modern Art Foundation / Collection: Queensland Art Galery	ELIZABETH WATSI SAMAN		c. 1939		Naboin clan, Selau language group ARCB	833.2018.Rox	(-6.3753919, 155.38
912.2018 3D	Katebo (basket)	40.0	5 26.7	18.9	201	Pol (cano) and rattan. Purchased 2018. Queensland Art Gallery   Gallery of Modern Art Foundation / Collection. Queensland Art Gallery	PRISCA SUANA		1985		Banoni language group AROB	912.2018.fbx	(6.3753919, 155.38)
918.2018 3D	Katebo (basket)	44,4	\$ 35.1	34	201	Per solution Per end rattan. Purchased 2018: Queensland Art Gallery   Gallery of Modern Art Foundation / Collection: Queensland Art Gallery	PRISCA SUANA		1985		Banoni language group AROG	918.2018.fbx	(-6.3753019, 155.380
919.2018 3D	Pai (basket for sweet potato)	24.)	/ 39.6	21.2	201	Per (carer) Purchased 2018. Queensland Art Gallery   Gallery of Modern Art Foundation / Collection: Queensland Art Gallery	MILCELLER GABU		1984		Banoni languaga group AROB	919.2018.lbx	(-6.3/53919, 155.38)
920.2018 3D	Pai (basket for sweet potato)	26.6	5 20.6	27	201	Pai (basket for sweet potato) Pai (carre/Purchased 2018. Queensland Art Gallery   Gallery of Modern Art Foundation / Collection. Queensland Art Gallery	MILCELLER GABU		1984		Banoni language group AROB	920.2010.fbx	(-6.3753919, 155.38
Sheet1	Sheet2 (+)			~			100 OCLI CO (0.001	-			a 1	001 0010 0	Leasenna arean
Sneet1	pueers (												

#### The interactive web-based 3D virtual tour must:

- Be deliverable via a web browser and able to be embedded in web pages.
- Meet accepted web standards and protocols
- Be an exact replica of the actual exhibition
- Be easily navigable
- Be robust
- Be small in size for effective delivery via the internet
- Each object must be interactive (2D or 3D)
- Each object must have associated didactic information and additional content

#### The photographic panoramic tour must:

- Be embedded in a webpage
- Allow users to easily navigate the 3D space
- Be able to be used with Google Cardboard devices

#### The client responsibilities included:

- Delivery of all content for the application
- Access to the gallery for photography
- Provision of gallery and exhibition drawings
- Photography of all objects that would be delivered as 3D

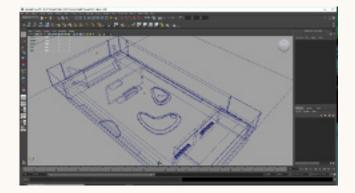
## **Running the Project**

1. The gallery space was modelled in detail based on plans, elevations and onsite photography.

2. All objects in the exhibition were recorded in a spreadsheet which was the 'link' between the exhibition content and the digital environment.

3. All 3D artworks were photographed creating more than 7,800 high resolution images These images were later used to create the digital 3D objects. A total of 3.5 terabytes of data was generated during the content creation process.

4. Photogrammetry was employed to convert the photographs to 3D models.



5. The 3D model of the gallery space was imported into a customised version of Ortelia Curator.

6. The spreadsheet was used to automatically import all the artworks (2D and 3D) into Ortelia Curator, with each object imported at the correct scale and with all associated information.



7. Ortelia Curator was then used to assemble the exhibition and the entire exhibition was posted to a web server for testing

8. Extensive testing of all aspects of the environment was undertaken, this included stress testing and checking of all content

9. Errors in content were corrected in the spreadsheet and reimported

10. Errors in program execution were recorded and fixed.

## Delivery

Throughout this process regular communication was maintained. Weekly emails describing progress and issues were exchanged. Face to face meetings were arranged on a monthly basis. At each stage of development, the client received a new release to test and comment on.

The client conducted the user testing which included checking content and running the application in multiple browser types and hardware platforms.

Bugs were recorded and reported and were addressed by the next iteration of the application.

## The Outcomes

- The final application was delivered as HTML5/ WebGL environment suitable for the web and compatible with popular browsers.
- The final application has a total download of 35Mb in size.
- 3D models and 2D artwork are streamed therefore minimising wait times.
- The exhibition has also been delivered as a photographic panoramic tour allowing it to be viewed as a Google Cardboard application.
- The digital exhibition is an accurate archive that is effectively a permanent exhibition

- Feedback from users suggests a comfortable, easy, engaging experience
- The launch of the interactive component of Women's Wealth was accompanied with a dedicated social media campaign https://play.qagoma.qld.gov.au/ womens-wealth/#exhibition

## You might also like:

Museums & Galleries of NSW Design Approaches to Digital Projects - A Beginners Guide

https://mgnsw.org.au/sector/resources/onlineresources/digital/design-approaches/

### 🇞 Cogapp

Museum Digital Strategy: Examples and Resources

https://www.cogapp.com/museum-digital-strategyexamples-resources/

## K Museums & Galleries of NSW Collection Management Systems

https://mgnsw.org.au/sector/resources/onlineresources/collection-management/collectionmanagement-systems/

#### Museums & Galleries of NSW Digital Suppliers List for Museums and Galleries

https://mgnsw.org.au/sector/resources/onlineresources/digital/digital-suppliers-list-for-museumsand-galleries/

This resource was written by **Lazaros Kastanis**, Director at Ortelia Interactive Services and was based on a workshop delivered in partnership with Wezit France, and Museum & Galleries of NSW for understanding and using digital engagement tools in the museum, gallery and collections sector.

Find out more about Ortelia Interactive Services: https://ortelia.com/

This resource has been developed as part of Museums & Galleries of NSW's Engaging Art initiative. Find out more about Engaging Art: https://mgnsw.org.au/sector/support/engaging-art/

This project has been assisted by the Australian Government through the Australia Council for the Arts, its arts funding and advisory body.



