Exhibition Digital Experiences

Digital technologies provide a valuable and engaging element of the exhibition visitor experience. At their best, digital displays and computer-driven interactives form an integrated part of the exhibition narrative and reinforce the learning objectives of the exhibition. They also leverage the digital tools and behaviors that visitors bring with them. Few visitors walk into the Museum without a smartphone or tablet, and many of them remain “connected” throughout their visit, providing greater opportunities for visitor engagement beyond the Museum walls.

Digital experience design is similar to exhibition design in that content, visuals, and technology are creatively combined to provide an experience for visitors that achieves specific learning objectives. A key part of the design process is determining when and how digital experiences should be incorporated into an exhibition, and the best methods to implement them.

Digital visitor experience design focuses on several goals:
- Achieve the learning objectives and experience goals of the exhibition.
- Provide engaging experiences that leverage visitor behaviors.
- Increase enjoyment of the exhibition experience for target audiences.
- Whenever possible, extend the visitor experience beyond the exhibition walls.

For purposes of exhibition development, the Museum’s digital experiences are divided into two categories: in-gallery and online. They overlap significantly and are designed to be integrated and seamless for the Museum visitor.

In-gallery digital experience elements may include but are not limited to the following. Each of these can range widely in scope and complexity:
- Information Kiosks
- Interactives (in-gallery, sometimes reflected online)
- Digital Displays (media walls, immersive, etc.)
- Social Engagement
- Labels, Signage, Promotion

Online digital experiences includes the Museum’s website, social media channels, and mobile app. Rather than present separate online exhibitions or multiple mobile apps, the Museum has focused on an integrated approach. Stories from all exhibitions are serialized and continually shared online, via the mobile app, and on social media. This approach enables remixing and personalization of content across exhibition themes. It also ensures visitors can find and engage with content based on their own interests.

The success of digital experiences is not only based on their design and function alone, but their placement, context, and the environment in which visitors encounter them. Digital experiences should therefore be conceptualized early in the exhibit planning process as an integral part of the exhibition design.

For the purposes of internal discussion and simplification of process, here are digital component categories defined in more detail:
Digital Components

- **Information Kiosks**
  A touchscreen with multiple choices (buttons) visitors can use to select and view prepared content (videos, text and images, etc.). This is not considered “interactive” because visitors cannot tailor the experience or alter the outcome in any way.

- **Interactives**
  Interactives are designed to achieve specific learning and experience goals, ideally one goal, two at most. Users are given an objectives or goal to accomplish and ideally are guided toward completion of the goal (learn by doing). Users are able to control or influence the outcome of the experience. Both positive and negative feedback can support the learning objective(s). The interaction may involve a touchscreen or other type of controller (e.g., joystick).

- **Visual or Immersive Displays** (media wall, immersive, etc.)
  Digital experiences can achieve a variety of goals within the exhibition space, and in some cases continue beyond it. Digital displays can become interactive without touch (gesture, sensor, projection), or be part of the exhibition environment to provide a context or feel (immersive, projection). These experiences are invariably more complex and require custom design and implementation strategies that are an integrated part of the overall exhibition design.

- **Connecting to Online and Mobile**
  In-gallery connections to the Museum’s website and mobile experience can include prompts to relevant digital content and to download the mobile app.

- **Social Engagement**
  Connecting to social media conversations, sharing opportunities within and outside the exhibition space, crowdsourcing and other participatory activities, and scheduled programs such as Socials and Reddit AMAs.

- **Labels, Signage**
  Includes labels placed throughout the exhibition to link visitors to the website, social media, or mobile content. Signage inside the Museum promoting the Museum’s mobile experience, and all of the physical to digital connections required to make visitors aware of the digital engagement available to them.

Digital Experience Implementation Process

1) **Exhibition Digital Experience Team**
   The digital experience team works together on digital components of the exhibition from early conceptualization through implementation. The digital experience team includes exhibition team members (curator(s), educator, and exhibition designer) and a Digital Experience design lead.
   
   *Note: Digital experience lead should ideally be a member of the exhibition core team to ensure digital experiences are conceptualized in concert with exhibition content.*
2) Digital Experience Plan
Each exhibition should have an overarching digital experience plan. This plan is a living document that outlines the digital experience goals, scope of each component, and general plan for implementation. In particular, the plan should include how the in-gallery and online experiences will work seamlessly together. As the project progresses, details of the plan are refined. This document serves as a reference as well as a record of decisions made throughout the project. One of more of the elements listed in the plan may have an individual experience narrative.

3) Experience Narrative(s)
For each major digital experience (interactive, digital display, etc), an experience narrative is developed. Key information includes:
- Title
- Purpose
- Target Audience
- Learning Objectives
- Experience Goals
- Experience Narrative (description)
- Assets (available vs. new required)
- Team/Key Stakeholders (roles & responsibilities)
- Evaluation/Testing
- Budget
- Implementation Notes

The Experience Narrative envisions what a visitor will see, hear, feel, do, and learn as they engage with the digital component. This narrative considers the entire visitor journey, from walking into the museum/exhibition to going online. This is also a living document that changes as the project progresses and experiences are tested and refined.

Note: Individual experience narratives may not be necessary for smaller exhibitions where the Digital Experience Plan is sufficient to cover everything.
Many exhibition projects begin with an experience narrative for the entire exhibition, not just the digital elements. This is recommended as it defines the entire visitor journey and can surface important details to be considered at the onset.

4) Prototype Evaluation
Create initial visual concepts and prototypes to test with visitors and/or target audiences. Research and refine approach.

5) Implementation Plan
- Technical & Functional Requirements
- In-House vs. Outsourcing
- Roles & Responsibilities
- Schedule
- Budget
6) **OCIO** (if required)
   - Technical Review Board (if required)
   - **Privacy** Review (if required)
   - In-gellery technical requirements ( electrical, networking, WiFi)
   - Test Plan/Quality Assurance

7) **Contracting** (if required)
   - Request for Proposals / Statement of Work
   - Pre-proposal vendor meeting
   - Deliverables

8) **Digital Content Requirements**
   a. Copyright Clearance/Use Permissions – online requires different usage permissions. Video in particular can have very stringent requirements.
   b. File formats – files for use with digital components must be high resolution TIFFs or JPEGs (sized down from Exhibition requirements is fine). Video and audio files must also be in pre-approved formats for online display.
   c. Metadata – all digital assets must be accompanied by appropriate metadata, including but not limited to:
      i. Title
      ii. Caption / Short Description
      iii. Long Description
      iv. Date created
      v. Photographer / Creator
      vi. Source (contact for reproductions)
      vii. Copyright holder
      viii. Credit (if different from copyright holder)
      ix. Image # / ID #

9) **Privacy**
   All digital experiences that solicit information from visitors (e.g., emails) must pass a Smithsonian privacy review. Anything engaging audiences 13 or under have especially stringent requirements for protecting visitor privacy. Digital Experience staff can design experiences that meet privacy guidelines and guide exhibition teams through the privacy review process.

10) **Sponsor Recognition**
    a. Sponsors page
    b. Links

11) **Development Stages**
    a. Alpha
    b. Beta
    c. Gold (Master)
12) **Review Process**

The digital experience team reviews progress throughout development. Additional reviewers may be consulted at major development stages. The exhibition editor reviews all final content. A final review can be done as part of the overall exhibition walk-thru/review or through a separate review process and signoff sheet.

13) **Final Testing and Installation**

All digital components undergo testing throughout development. A final test phase is conducted following a standard Test Plan that includes technical and functional requirements as well as custom visitor experience scenarios specific to the original experience goals. Quality assurance testing can take days or weeks, depending on the scope of the project. Some elements cannot be fully tested until they are live or in a production environment. OCIO conducts security scans of any products hosted in the Smithsonian server environment, which must pass prior to public launch. Installation of in-gallery digital components is conducted by Exhibits Technology, in cooperation with contractors when applicable.

14) **Launch**

Digital components are typically soft-launched days or weeks prior to public launch, depending on the review and testing required. At minimum, soft-launch occurs the day before the press preview and made available to the press before public opening.

**Relevant Guidelines**

- Digital Project Process: See page seven below.
- User-Experience Guidelines:
**Digital Project Process**
This is a very generalized process for developing new digital initiatives (e.g. a website, mobile experience, social media program). The process is defined case by case and does not always include every step or in this order. The process is iterative - a repeating cycle of assessment, implementation, testing, and refinement.

**PROJECT PLAN**
The first step for any digital project is the project plan. An initial meeting with a WNM representative will involve defining a project plan and filling out a Project Plan form. This part of the process includes defining:

- Goals
- Target audience
- Learning Objectives
- Intended Outcomes
- Experience Narrative (will change)
- Roles & Resources
- Technical Requirements (will change)

**DISCOVERY**
- Audience research - assessment / evaluation / user personas
- Content Inventory - review existing assets & needs, build out over project
- Competitive analysis / benchmarks
- Internal Coordination and Stakeholder Engagement (Build team, PPC approval, PMP as req'd)

**EXPERIENCE PLANNING**
- Experience Brief(s) (narrative describing what the audience will experience from a user perspective)
- Define Scope of Work (including budget, if outsourced)
- Information Architecture (Navigation)
- UX Design / Wireframes / Design comps
- Iterative user testing

**CONTENT DEVELOPMENT**
- Write & edit (refine existing / create new)
- Asset gathering/research
- Iterative review & refinement with content experts & visitor testing
- Final editorial review/approval

**IMPLEMENTATION PLAN**
- Technical requirements
- User Testing Plan
- QA/Test Plan
- Maintenance Plan
- OCIO Process (TRB / Tailoring Agreement / Privacy / PPR)

**BUILD**
- Server setup
Product/Template setup
Design
Populate Content
Application Development
Quality Assurance
Review/Approval at key stages (Alpha, Beta)

**TEST**
Iterative testing & refinement at key stages
User testing / Usability
Quality assurance testing

**FINAL REVIEW / APPROVAL** (Gold - may require sign off)
OCIO process (security scan / OCIO test plan)

**LAUNCH**
Evaluate
Report
Refine
Rinse & Repeat