



Vizcaya Museum and Gardens

Interpretive Technology Plan

Interpretive Technology Plan Primary Action Points

1. A museum technology plan should focus on integrating technology into exhibitions, education, and visitor services programs to transform the way visitors experience the museum on site and online.
2. The technology plan should be embedded into the museum's overall strategic plan and each individual division's comprehensive strategic mission plans.
3. A planning committee is critical to the success of any technology plan. The committee should include expertise in planning, building a vision, needs assessment, exhibitions, learning, evaluation, goal setting, professional development, technology hardware, support and integration, media/marketing, and financial planning.

Interpretive Technology Plan Goals

**Matched to Vizcaya Museum and Gardens Strategic Plan Goals*

1. Technology is used as an interpretive tool for understanding and to drive active and social experiences.
(Goal II: Engagement: strategy A, B, C, D)
2. Visitors experience moments of discovery about Vizcaya that makes the museum relevant for them.
(Goal II: Engagement: strategy A, B, C, D)
3. Technology is used to make systems more efficient and where appropriate visitor centered.
(Goal II Engagement: strategy A, B, C, D)
(Goal III Organizational Structure: strategy A, C)
(Goal IV Financial Resources: strategy A action 4)
4. Increase level of collection information accessible through open access for non-commercial and commercial use and re-use. Use new technologies and partnerships continuously to maintain leadership in collection access at Vizcaya Museum and Gardens.
(Goal I: Preservation: strategy B, C)
(Goal II: Engagement: strategy B, C, D)

Evaluation/Research Goals:

1. Evaluation techniques should be used throughout the development of the VMG technology interpretive programs. Prior to program development, a quantitative survey and a focus group should convene to gather information on visitor attitudes and use of technology in museums. This information will be used to initially define potential audiences and their individual interests. Formative testing will happen during program development to test program design and usability as a basis for

making iterative improvements. Once the programs are installed and the new spaces open, further quantitative research should be conducted to assess the impact of the new interpretive programs on the visitor's experience.

2. Research should be large in scope, assessing visitor awareness and use of a range of technologies. A wide range of techniques in assessing visitor use of museum technology should be employed. These techniques could include general visitor surveys, baseline and post-visit technology awareness surveys, baseline and post-interactive learning station surveys, and focus groups. Beyond visitor use and satisfaction, the research should explore general visitor awareness of the gallery-based technology.

Preliminary Steps

1. Develop and formalize VMG Interpretive Technology Plan. Align the plan with the Strategic Master Plan using similar format for actions.
2. Formative research: prior to program development, a quantitative survey and a focus group should convene to gather information on visitor attitudes and use of technology in museums. What is already available, what current research already exists.
3. Communicate with potential partners at local universities and in the technology industry to explore possibilities for the use of technology in meeting audience needs and expectations as well as museum needs.
4. Work across museum divisions with external partners to realize museum-wide goals such as optimization of the website and other technological tools that serve the museum's mission.

Areas of Focus for Interpretive Technology Plan:

- Website/web presence
- Visitor Center/Orientation Space
- Newsletter
- Self-guided experiences
- Guided experiences
- Off-site/Outreach Museum Experience
- Staff Training/Awareness
- Marketing
- Development/ Membership
- Technical Support/Infrastructural Concerns - Streamlining multiple technology sources across all platforms and integrate all programs for easier use by staff and for reporting point of sale and advanced event ticketing/ Access control

Ideas

The resulting interactive media and installations should be designed to match the audience's interpretive needs while simultaneously considering potential differences in individual learning style. Media installations to consider:

- short passive video loops (with a maximum length of three minutes) illustrating a limited number of concepts
- computer-based games requiring visitors to apply their knowledge to solve a problem or answer a question
- creative inter-actives where the visitor makes design choices to create a personalized "product"
- social inter-actives where visitors can contribute their thoughts and feedback to the museum and to larger topical community discussions (connected with the VMG's Web site)
- longer, large-topic video programs
- audio access points, where visitors can choose to listen to a short audio program
- Use of augmented reality to provide extended information on artifacts

Visitor Center/Orientation Space (Village): experience that would welcome all visitors, with particular focus on Miami-Dade families, college students, and young professionals.

- Kiosks: Visitors could access kiosks set up at key locations around the village, rent iPads for the day, or use their own mobile device as a personal digital tour guide. Self-guided technology integrated tours with Kiosks and mobile devices and easy and quick access to collection information, information on James Deering and the development of Vizcaya. The Kiosks could contain wide range of digital video clips that play automatically as an "attract sequence" or could be interactively selected via the touch-screen interface.
- Access control and check-in system for members. Will provide speedy entrance onto property and also allow members to review any members-only activation and programs on-site that day. Will also allow members instant access to benefits.
- Mobile POS for sales of tours and membership on-grounds.
<http://www.gatewayticketing.com/Products/GalaxyPhotoPassMembershipModule.aspx> lookinto the Pas module, RFID, and stored value. (Luis plans on using Gateway for new entrance. Can possibly take over as main POS for membership as well.)

Self-Guided

- Kiosks: Visitors could access kiosks set up at key locations inside the house, and around the gardens and village, rent iPads for the day, or use their own mobile device as a personal digital tour guide. Self-guided technology integrated tours with mobile devices – App development- allows you to personalize your experience of the collection both at the museum and from home.
- Current Example: Develop and pilot an interpretive learning project for family and intergenerational audiences within the Main House (VIZstories). Integrate this interpretive project with the family pass program and partners and the membership program to develop local/community visitation and to encourage repeat visitation.
- Dialogue Table: Different from the more standard terminal or kiosk approach to gallery-based technology installations, the Dialog Table designed as a more traditional table to promote social interactions among visitors while providing access to the VMGs multidisciplinary collections and related interpretive information. Design allows for the unique opportunity for multiple users to simultaneously manipulate the screen's contents and to potentially work in collaboration (Walker Museum of Art).
- NFC's: Explore NFC's at strategic points in the house and gardens.
- Living Labels: allows visitors to type in their thoughts and interpretations of museum objects and click 'send'. Their interpretation becomes part of the object's history and ultimately the display itself via the interactive label system to allow the display of comments and information directly next to the artifacts.
- Mobile Apps: Develop a mobile application to explore the gardens. Mobile Applications: Engage audiences where they are, Open access to our data, collections and research, Create new opportunities for learning, Equip Vizcaya staff with new tools, Transcend disciplinary boundaries by connecting communities, conversations and initiatives with both public and private partners (Digital footprints. Like Nike Fitness, allow members to track their visits and pathways on the grounds during their visits.)
 - Current Example: The Smithsonian released a crowdsourcing application called LeafSnap that encourages users on the Eastern Seaboard to take photographs of leaves with their smartphones, identify trees from a vast database and then upload these to a central location, automatically tagged with GPS coordinates. The data helps give researchers a better

picture of the distribution of species across the region while also honing people's skills and knowledge in identifying trees in a fun way.

- Digital Scavenger hunts: SCVNGR, go game, ScanVenger, and Goose Chase. iPad-based game for middle-school age students. The players search for QR codes to scan which activate a Quest in the game. Quests require players to interact with the exhibits in ways that encourage engagement in science and engineering practices. Players upload responses in the form of pictures, audio, video or text as evidence that they have completed a particular quest. The platform to create this game and others is a free, open-source location-based game development platform called ARIS. ARIS is being developed at the University of Wisconsin in Madison and is a remarkable tool for creating these kinds of game-based learning experiences. arisgames.org
- Build off of the Discover Vizcaya audio tour to possibly add technology-based interactive component.
- Game Jam: collaboration between the museum, local universities and tech companies create mini games as a way to animate collections or exhibits in the museum.
- Accessibility: Focus on special needs audiences for technology mediation. Do smaller screens result in a closer engagement between museum visitor and content? Do touchscreens get a higher usage rate among visitors?
 - Create a new form of media to replace second floor video. Interactive touch screen technology.
 - Use of technology and webcams to create livestreams of conservation efforts in progress or in timelapse. Can also be used facing the barge as daily weather report at Vizcaya.

Guided Experiences

- Tours: Guides can utilize iPads on tours to enhance visual resources available to them and visitors that relate to discussions.
- Area Guiding: Serve visitors' learning needs and answer questions beyond tours. Position Guides with iPads in key locations to answer visitors' questions. These roving or area guides could engage visitors in conversation and use the iPad to look up information relevant to the visitors' questions and show close-ups of objects visitors cannot approach and show historic images of the estate. Guides can roam the

museum answering questions, directing visitors, striking up casual conversations and telling stories that are reinforced through technology resources.

- Current Example: LPFs currently share with visitors archival images of the gardens, barge, James Deering's bedroom, East Loggia, and Courtyard.
- School Programs: Vizcaya is ready to incorporate a full range of innovative media-based teaching tools into its School Programs through the purchase and use of network-ready iPads. These iPads will enable students to access an array of archival materials, web-based learning resources, iBooks and websites, including Vizcaya's own forthcoming redesigned website with expanded information on its collections. The Museum will use these iPads to pilot a new structured self-directed opportunity for visiting high school groups in the Main House.

Off-site/Outreach Museum Experience

- Online exhibits: Online mini-exhibitions which aims to spark discussions by once or twice a week posting an image of an object, accompanied by an essay and a question posed to viewers.
- News Flash: The impulse to connect events in the news to works of art in museums is common among art museum educators, and the Minneapolis Institute of Arts has created a team to bring that impulse to life. Every Wednesday a group stand around a table sharing ideas in a pitch-style meeting. This half hour meeting is a place for any staff member to pitch a "News Flash," a label that highlights the relationship between the museum's collection and current events. "News Flash" labels "make that connection of the relevance of the collection to our viewer,".
- Living Labels: QRator allows visitors to type in their thoughts and interpretations of museum objects and click 'send'. Their interpretation becomes part of the object's history and ultimately the display itself via the interactive label system to allow the display of comments and information directly next to the artifacts.
- Mobile Apps: Develop a mobile application to explore the gardens. Mobile Applications: Engage audiences where they are, Open access to our data, collections and research, Create new opportunities for learning, Equip Vizcaya staff with new tools, Transcend disciplinary boundaries by

connecting communities, conversations and initiatives with both public and private partners.

- Post visit Digital-Souvenir : Many of the digital assets used on iPads by tour guides could be generated by the museum for print publications and online access. Recent development in ebook publishing such as Apple's iBook Author will provide new opportunities to produce free or low-cost e-souvenirs directly tying the resources related to a tour to an extended post-visit experience. Tour guides offering iPad enhanced tours could conclude the tour by showing a preview of a related e-souvenir book and either collecting email addresses or providing a URL where the publication can be accessed. These e-souvenirs offer a great deal of future potential as collectables and launching points to both online tour related content and other commercial electronic and print-based publications.
- Digital passport where frequent visitors can "check-in" to redeem points
- Printed picture souvenirs – kid friendly digital cameras that print out images.
- Online mini-exhibitions: aim to spark discussions by once or twice a week posting an image of an object, accompanied by an essay and a question posed to viewers.
- Online Courses: Digital education offerings fee-based courses (offered via their website) and, free Massive Open Online Course (MOOC) offered via Coursera. MOOCs connect the museum with new audiences that might never find us any other way and provide teachers with high quality content that is essential to their professional success.
- Online Exhibits: Google Open Gallery can be used by small local galleries or large national museums, helping them publish some of their physical artifacts to the Web. Google hosts the actual content on the /culturalspot.org domain, and doesn't charge for using the technology.
- Twitter:
 - This day in history
 - Object of the day
 - MuseumWeek.- behind the scenes
 - Monday's theme will give an insider perspective to a typical day at the museum (#DayInTheLife),

- Tuesday museums will ask questions, propose riddles and create quizzes to test people's knowledge (#MuseumMastermind).
- Wednesday people will be asked to take a trip down memory lane and share their story, from favourite museums to memorable visits (#MuseumMemories).
- Thursday will offer an alternative insight into the structure, architecture and history of museums (#BehindTheArt).
- Friday there will be a unique opportunity for culture lovers to connect directly with the experts, and get their questions answered (#AskTheCurator).
- Saturday is selfie day when museums will encourage people to create their own museum portrait (#MuseumSelfies).
- Sunday people will be asked to tweet new titles for historic artwork, to summarise collections in 140 characters or provide a tour of a collection in a Vine video (#GetCreative).

Website

- Consider Web 2.0 concepts. Approach improvements and enhancements of website with lens of audience engagement and audience resources, possibility of a companion web presence.
- Members only section. Requires signing-in. will feature access to scholarly articles, digital archives, Vizcaya images, and access to event photos from previous events.

Staff

- Intensive training and awareness of technology initiatives.

Marketing

- Update the Vizcaya experience, its content and its brand as more relevant, accessible, and accountable to constituents. *Share social media responsibilities across divisions as this medium services much more than just marketing.

Development

- Utilization of new systems for membership programs, badges, and tracking programs as demonstrated and modeled by other institutions.
- Utilization of new systems for cultivation and sustaining funding sources

- Develop a rewards system for members that can be redeemed for free-programs, additional benefits etc.

Interpretive Technology Plan – Technical Support/Infrastructural Concerns

- Evaluation Assessment (formative and summative)
- Security & Maintenance (hardware)
- Program Systems & Analytics (software)
- Identity Management (sign-on, portals, staff and public)
- Staff Awareness (training and use)
- IT Policies (internal & external)
- Mobile & Wireless (access and maintenance)
- Web Development and Presence (enhancements and interactivity)
- Funding (development and sustainability)

