

Museums and Technology: Examples to Explore

1. Databases

1.A University of Alberta Museums

<http://www.museums.ualberta.ca/dig/search.htm>

- Pauline Rennick, Victor Gatnicki, Jim Whittome, Janine Andrews, and Frannie Blondheim, "The Little Search Engine That Could: How an On-line Database is Paving the Way for Enhanced Access to Research Collections" in David Bearman and Jennifer Trant (eds.). *Museums and the Web 2004: Proceedings*. Toronto: Archives & Museum Informatics, 2004. <http://www.archimuse.com/mw2004/papers/rennick/rennick.html>

1.B Sculptur Demonstrator

<http://www.sculpteurweb.org/>

- Addis et al., New Ways to Search, Navigate and Use Multimedia Museum Collections over the Web, in J. Trant and D. Bearman (eds.). *Museums and the Web 2005: Proceedings*, Toronto: Archives & Museum Informatics, published March 31, 2005 at <http://www.archimuse.com/mw2005/papers/addis/addis.html>

1.C MuseumFinland / MuseoSuomi

<http://www.museosuomi.fi/>

- Eero Hyvönen, Miikka Junnila, Suvi Kettula, Eetu Mäkelä, Samppa Saarela, Mirva Salminen, Ahti Syreeni, Arttu Valo, and Kim Viljanen, "Finnish Museums on the Semantic Web: The user's Perspective on MuseumFinland". David Bearman and Jennifer Trant (eds.). *Museums and the Web 2004: Proceedings*. Toronto: Archives & Museum Informatics, 2004. <http://www.archimuse.com/mw2004/papers/hyvonen/hyvonen.html>

2. Web 2.0 [contributory and interactive]

2.A Tagging

Powerhouse Museum, OPAC 2.0

<http://www.powerhousemuseum.com/collection/database/>

- Sebastian Chan, What do the barbarians at the gates want to look at? : Web2.0 and collections, *Museums and the Web 2007*, http://www.archimuse.com/mw2007/abstracts/prg_320000798.html

2.B Contributed Content: Custom Application
Icons – a portrait of England
<http://www.icons.org.uk/>

2.C Contributed Content: Open Source [drupal]
Science Buzz: Science Museum of Minnesota
<http://buzz.smm.org/buzz/>

- von Appen K., Kennedy B. and Spadaccini J., Community Sites & Emerging Sociable Technologies, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/vonappen/vonappen.html>

2.D Contributed Content: flickr
Brooklyn Museum: Brooklyn Bridge
<http://www.brooklynmuseum.org/research/digital-collections/brooklynbridge/community/>
<http://www.flickr.com/groups/brooklynmuseumbrooklynbridge/pool/>

2.E Contributed Content: Open Source Wiki
The Minnesota Artists Exhibition Program (MAEP) – MAEPedia
<http://www.artsmia.org/maep/wiki/>

- Hoffmann, P., and M. Herczeg, Attraction by Interaction: Wiki Webs As A Way To Increase The Attractiveness Of Museums' Web Sites, in J. Trant and D. Bearman (eds.). *Museums and the Web 2005: Proceedings*, Toronto: Archives & Museum Informatics, published March 31, 2005 at <http://www.archimuse.com/mw2005/papers/hoffmann/hoffmann.html>

3. Getting the Word Out

3.A Podcasting
San Francisco Museum of Modern Art
http://www.sfmoma.org/education/edu_podcasts.html

- Samis, P. and Pau, S., 'Artcasting' at SFMOMA: First-Year Lessons, Future Challenges for Museum Podcasters broad audience of use, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/samis.html>

3.B Blogging
University of British Columbia Botanical Garden and Centre for Plant Research
Botany Photo of the Day

3.B.1 <http://www.ubcbotanicalgarden.org/potd/> (Botany photo of the day, blog)

- Mosquin, D., All Weblogs Are Not Created Equal: Analyzing What Works, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/mosquin/mosquin.html>
- MuseumBlogs.org – <http://www.museumblogs.org>

3.C RSS

The 24hour Museum

<http://www.24hourmuseum.org.uk/>

- Pratty, J., The 24 Hour Museum Tunable RSS News Feed, in J. Trant and D. Bearman (eds.). *Museums and the Web 2005: Proceedings*, Toronto: Archives & Museum Informatics, published March 31, 2005 at <http://www.archimuse.com/mw2005/papers/pratty/pratty.html>

4. Engagement

4.A 3-D environments In Interpretation: Monticello Explorer

<http://explorer.monticello.org/>

- Johnson, B., Place-based Storytelling Tools: A new look at Monticello , in J. Trant and D. Bearman (eds.). *Museums and the Web 2005: Proceedings*, Toronto: Archives & Museum Informatics, published March 31, 2005 at <http://www.archimuse.com/mw2005/papers/johnsonB/johnsonB.html>

4.B 3-D environments Virtual Realities: museums in second life

New Media Consortium Virtual Worlds project

<http://virtualworlds.nmc.org/>

- Paul Marty, Michael Twidale, Richard Urban, A Second Life for your Museum: The use of 3D collaborative virtual environments by museums, *Museums and the Web 2007*. http://www.archimuse.com/mw2007/abstracts/prg_325000947.html
- Workshop: Creating Interactive Content and Community in Second Life Rob Rothfarb, Paul Doherty, Aimee Weber, *Museums and the Web 2007* http://www.archimuse.com/mw2007/abstracts/prg_325000901.html

4.C Gaming: Discover Babylon

<http://www.discoverbabylon.org>

- Lucey-Roper M., Discover Babylon: Creating A Vivid User Experience By Exploiting Features Of Video Games And Uniting Museum And Library Collections, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/lucey-roper/lucey-roper.html>

4.D Gaming: Questacon

<http://smartmoves.questacon.edu.au/csi/index.htm>

- Crane G., Questacon-CSI: A Four Player On-line Homicide Investigation Game in a Museum Context, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/crane/crane.html>

4.E In-Gallery: PUCRS Science and Technology Museum

During visit students using mobile tablets, see

- Silveira, M., et al., Using Mobile Devices to Help Teachers and Students during a Visit to a Museum, in J. Trant and D. Bearman (eds.). *Museums and the Web 2005: Proceedings*, Toronto: Archives & Museum Informatics, published March 31, 2005 at <http://www.archimuse.com/mw2005/papers/silveira/silveira.html>

**4.F Cell Phone Tours
Brooklyn**

- Nickerson, M., 1-800-FOR-TOUR: Delivering Automated Audio Information through Patron's Cell Phones, in J. Trant and D. Bearman (eds.). *Museums and the Web 2005: Proceedings*, Toronto: Archives & Museum Informatics, published March 31, 2005 at <http://www.archimuse.com/mw2005/papers/nickerson/nickerson.html>
- Arts, M. and S. Schoonhoven, Culture Around The Corner And Its Location-Based Application, in J. Trant and D. Bearman (eds.). *Museums and the Web 2005: Proceedings*, Toronto: Archives & Museum Informatics, published March 31, 2005 at <http://www.archimuse.com/mw2005/papers/arts/arts.html>

4.G Teacher / Student: Wonder Walls at the 4-H Children's Gardens

- Lownds N. and Heeter C., Connecting Beyond the Field Trip: The On-line Wonder Wall, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/lownds/lownds.html>

4.H Distance Learning: United States Holocaust Memorial Museum, Educational Activities
<http://www.ushmm.org/education/forstudents/>

- Christine Sonnabend Vitto, "If We Build It, Will They Come? A Year of Testing Distance Learning Using the Web", in David Bearman and Jennifer Trant (eds.). *Museums and the Web 2004: Proceedings*. Toronto: Archives & Museum Informatics, 2004. <http://www.archimuse.com/mw2004/papers/vitto/vitto.html>

5. On-line & On-site

- Scott Sayre, Sharing the Experience: The Building of a Successful Online/On-site Exhibition, D. Bearman and J. Trant eds., *Museums and the Web 2000: Proceedings*, Pittsburgh: Archives & Museum Informatics, <http://www.archimuse.com/mw2000/papers/sayre/sayre.html>
- Lincoln M., The On-line and the On-site Holocaust Museum Exhibition as an Informational Resource, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/lincoln/lincoln.html>

- Barry A., Creating A Virtuous Circle Between A Museum's On-line And Physical Spaces, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/barry/barry.html>
- Salgado M. and Diaz-Kommonen L., Visitors' Voices, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/salgado/salgado.html>

6. Accessibility

- Petrie, H., King, N. and M. Weisen, The accessibility of museum Web sites: results from an English investigation and international comparisons, in J. Trant and D. Bearman (eds.). *Museums and the Web 2005: Proceedings*, Toronto: Archives & Museum Informatics, published March 31, 2005 at <http://www.archimuse.com/mw2005/papers/petrie/petrie.html>
- Proctor, N., Providing Deaf and Hard-Of-Hearing Visitors With On-Demand, Independent Access To Museum Information and Interpretation Through Handheld Computers, in J. Trant and D. Bearman (eds.). *Museums and the Web 2005: Proceedings*, Toronto: Archives & Museum Informatics, published March 31, 2005 at <http://www.archimuse.com/mw2005/papers/proctor/proctor.html>
- Reich C., Universal Design of Computer Interactives for Museum Exhibitions, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/reich/reich.html>

7. Evaluation

- Kate Haley Goldman and David Schaller, "Exploring Motivational Factors and Visitor Satisfaction in On-line Museum Visits, in David Bearman and Jennifer Trant (eds.). *Museums and the Web 2004: Proceedings*. Toronto: Archives & Museum Informatics, 2004. <http://www.archimuse.com/mw2004/papers/haleyGoldman/haleyGoldman.html>
- List at <http://conference.archimuse.com/biblio/keyword/Evaluation>

Museums and Technology: Resources

1. Technology Management Assistance

- 1.A Non-Profit Management Library**
<http://www.managementhelp.org/>
- 1.B Alliance for Nonprofit Management: Finding a Consultant**
http://www.allianceonline.org/Provider_Search
- 1.C TechSoup – The Technology Place for Nonprofits**
<http://www.techsoup.org>

Learning Center includes articles on many topics, such as:

- Robert Weiner, “Ten Common Mistakes in Selecting Donor Databases: How to avoid choosing the wrong database for your organization. Techsoup. January 10, 2007
<http://www.techsoup.org/learningcenter/databases/page6085.cfm>

2. Collections Documentation

- 2.A Collections Management Software Review**
http://www.chin.gc.ca/English/Collections_Management/Software_Review/index.html
 - Available products, comparisons and evaluation advice
- 2.B Technical Advisory Service for Images (TASI)**
<http://www.tasi.ac.uk/>
 - Technical advice and documentation
- 2.C North East Documentation Conservation Center School for Scanning**
<http://www.nedcc.org/home.php>

3. Evaluating your Web Site

- 3.A Usability Analysis of Web Sites**
 - Paul Marty and Michael Twidale, Lost in gallery space: A conceptual framework for analyzing the usability flaws of museum Web sites. *First Monday*, volume 9, number 9 (September 2004), http://www.firstmonday.org/issues/issue9_9/marty/

3.B Remote Usability Testing

- Hecht P., Viewing The Viewer: Remote Usability Testing, in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at <http://www.archimuse.com/mw2006/papers/hecht/hecht.html>

4. Museum Community Resources

4.A Museum-L

<http://home.ease.lsoft.com/scripts/wa.exe?SUBED1=MUSEUM-L&D=0&T=0>

4.B Museums and the Web Online

<http://conference.archimuse.com/>

4.C Museum Computer Network

<http://www.mcn.edu/>

5. Jewish Cultural Resources On-line

5.A The Online Jewish Museum of the Next Generation

<http://www.toldot.org/>

5.B Beth-Hatefutsoth

<http://www.bh.org.il/index.html>

5.C Internet Jewish History Sourcebook

<http://www.fordham.edu/halsall/jewish/jewishsbok.html>

5.D Jewish Virtual Library

<http://www.jewishvirtuallibrary.org/jsourc/index.html>

5.E Jewish Heritage Online Magazine

<http://www.jhom.com/index.htm>

5.F Jewish Encyclopedia

<http://www.jewishencyclopedia.com/>

Managing Technology Projects

- Project must address mission/programmatic objective
- What success means must be expressed in non-technical terms upfront
- Widespread understanding and acceptance by staff across museum essential
- Supported from the top
- Functional requirements articulated, agreed, and made basis for acceptance tests
- Project responsibility assigned broadly
- Responsibilities for on-going data contributions and museum wide support accepted by all involved
- Basis for accepting a proposal (in house or out sourced) agreed
- Extensive research conducted to determine where to send rfp
- RFP language blind tested, preferably with professionals from outside museum
- Project includes interim user testing and formative evaluation stages
- Formal instruments for proposal evaluation signed off before rfp
- Substantial time is allowed for assessment of proposals
- Contract incorporates all aspects of proposal and includes payment only for reusable deliverables with significant hold-backs until final acceptance. Internal “contracts” are agreed for project oversight and management
- Concrete schedules for the entire project team – inside and out – are mutually agreed in writing
- Communication around all aspects of the contract is formal and cites the specific requirement and deliverables under discussion
- Each deliverable is formally accepted or not, and acceptance test are rigorously applied
- Payments are directly tied to contracted deliverables and passed tests.
- Implementation plans involve entire museum staff, at least at level of being informed. Project progress is publicly posted and regularly referenced.
- When ready to implement, programmatic objectives and success criteria are revisited. Plans for summative evaluations are made before any implementation begins.
- Soft launch if possible; if not possible, conduct extensive usability tests with non-participants before launch.
- Prepare and distribute extensive publicity materials to ensure greatest possible use – failure from non-use is always a possibility.
- Conduct summative evaluations
- Brief museum staff on early feedback, impacts, and implications and ensure they are ready for long-term maintenance and feeding.