

***WHAT CLICKS?* EVALUATION REPORT**
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INTRODUCTION

With a grant from the Institute of Museum and Library Services (IMLS), the Minneapolis Institute of Arts (MIA) undertook an interactive media research and development project in 2000. The project, *What Clicks?* aimed to examine and increase the audience effectiveness of the MIA's digital media resources. At the project's beginning, museum staff developed a logic model and evaluation plan. Specifically, they determined that the project's purpose was to work toward five outcomes:

- Increase on-line visitors use of and satisfaction with www.artsmia.org;
- Increase on-site visitors use of and satisfaction with three gallery interactive kiosks (Africa, Asia, and the Museum Directory);
- Increase awareness and use of www.artsmia.org by on-line non-users;
- Increase awareness and use of three interactive kiosks (Africa, Asia, and the Museum Directory) by on-site digital media non-users; and
- Increase awareness of and knowledge about strategies and techniques that provide visitors information through digital media.

In short, the project aimed to increase awareness, use and satisfaction of the MIA's Web site, Interactive Learning Stations (ILSs) and Directory. Project staff developed a project theory that increased awareness leads to increased use, which leads to increased satisfaction.

This evaluation report examines the project's impact, including intended and unintended outcomes. The evaluation report has five parts: introduction, findings, contributing factors, challenges and conclusion. The project's progress is well documented in the Final Performance Report prepared by Cincinnatus and museum staff. The data from the Cincinnatus report will be used and referenced in this evaluation report. The evaluation report also identifies factors influencing the project's progress. Overall, the report notes the growth toward the IMLS mission of helping museums to provide the highest quality services; assuring the broadest access to information and opportunities offered by the museum; and helping the museum make a difference in the lives of its users. To this end, the report discusses both lessons learned and growth experienced by museum staff during the course of the project.

Methodology. Much of this report is based on data collected by Museum staff as part of the *What Clicks?* project. These data are discussed in detail in the appendix of the Final Performance Report, and they include the following sources:

- Pre- and Post- Technology Awareness Surveys;
- Pre- and Post- Visitors Surveys;
- Pre- and Post- Directory Surveys;
- Pre- and Post- Learning Stations Surveys;
- Pre- and Post- Web Surveys;
- Usability Lab Findings;

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- Web site and ILS statistics;
- Web Terms Survey; and
- Focus Groups with users and Museum staff.

The evaluators have reviewed the data and methodologies used to collect the data and found that several of the above sources include valid and reliable data. In particular, the three focus groups, the Web site and ILS statistics, and the usability labs are methodologically sound sources of data that support conclusions. Other sources have limitations. The pre- and post- surveys – including the Technology Awareness Survey, the Visitors Survey, the Web Survey, and the Directory and ILS surveys – included slightly different questions in each version, making pre- and post- comparisons difficult. In addition, the post- surveys were administered shortly after the redesigns of the Web, Directory and learning stations were completed, leaving little time for measurable change to happen. Although the sample size for most of the surveys was around 400, relatively low usership of the ILS s during the study times led to very low – and statistically unreliable – sample sizes of around 100 users for those surveys. Thus, these findings are likely to underestimate change. Finally, the number surveyed in the Web survey represented less than 2 percent of artsimia.org visitors, making generalizations to all users difficult.

While some data have limitations, this evaluation has used several sources of data to identify themes across data sources. A consistent theme across several sources is considered in this report as reliable and valid. The findings of this evaluation include only those observations that are substantiated by reliable data sources or multiple data sources.

In addition to the above-mentioned data sources, this report also draws on evaluators' and *What Clicks?* staff observations.

FINDINGS

Progress. Overall, the *What Clicks?* project resulted in sizeable accomplishments. During the course of the project, significant increases were seen in visitor awareness of the Museum's Directory and ILSSs, and growth was also seen in reported awareness of the Web site, although this increase was not statistically significant. Significant growth also occurred in measures of visitor satisfaction with the Directory. While use of the Web site, Directory and ILSSs remained the same during the two project years the findings of this report demonstrate that the Museum is on track to increase use in the future. During the course of the *What Clicks?* project, many strategies were tested, some more effective than others. The Museum at the end of this project has the ability to implement the lessons learned, cast out the tested strategies that were least effective and continue to use the proven successful strategies. The lessons that the Museum learned position it well for increased awareness, satisfaction and use of interactive media.

The findings below are listed by technology application.

Museum Directory Findings

- **Awareness:** Surveyed visitors' awareness of the Museum Directory from 2002 to 2003 significantly increased, according to the Technology Awareness Survey.
- **Use:** The overall use of the Directory remained the same from 2002 to 2003, according to the Technology Awareness Survey. However, the Directory Survey showed users were significantly more likely to use the Directory for longer periods of time in 2003. In addition, use by first-time users significantly increased, with first-time users making up a larger percentage of total users surveyed in 2003.
- **Satisfaction:** Surveyed visitors reported statistically significant increases in satisfaction with the Directory, according to the Directory Survey. Also, significantly more users reported that they found the Directory information "extremely" or "very" clear in 2003, that they found what they were looking for, and that they used it for five minutes or longer, according to the same survey – all indicators of satisfaction.

In fact, the most progress toward achieving stated outcomes was seen in the area of the Museum Directory. Awareness of the Directory increased more than awareness of any other Museum element. Interestingly among the three interactive media resources in the project, the Directory's intervention was the greatest, changing it the most. The redesign, based on baseline data, included adding an attract video, bigger and brighter screens, keyboard and mouse access, an Art Finder function, more general information and a common database. Post-redesign data collected from surveys, usability labs and user statistics suggest that the redesign was hugely successful.

Interactive Learning Station (ILS) Findings

- **Awareness:** Significantly more surveyed visitors reported being aware of the ILSs from 2002 to 2003, according to the Technology Awareness Survey. Significantly more visitors also found the stations "extremely" or "very" visible. Overall reported awareness of the stations by first-time users remained the same, although significantly more first-time users found the stations to be "extremely visible" in 2003.
- **Use:** Use of the ILSs remained the same from 2002 to 2003, according to the Technology Awareness Survey and ILS statistics. Duration of use also remained the same from 2002 to 2003, according to the ILS surveys. Use by first-time users decreased as a percentage of all users surveyed.
- **Satisfaction:** Satisfaction among the reporting ILS users remained at the same high levels from 2002 to 2003, according to the ILS Survey. Most (71 percent in 2003) visitors were "extremely" or "very" satisfied in both years. Although growth in satisfaction remained constant, answers to

other survey questions that pertained to satisfaction levels were high in both years. In addition, focus group participants reported high levels of satisfaction with small video displays (LCDs) temporarily and experimentally placed throughout the Museum galleries. These tested visitors' reactions to video content in close proximity to selected works of art.

Web Site Findings

- **Awareness:** Surveyed Museum visitors' reported awareness of the Web site increased about 5 percent from 2002 to 2003, although that increase was not statistically significant, according to the Technology Awareness Survey. Visitor survey results also affirmed the same growth pattern from 2001 to 2003. Notably, reported awareness was higher for the Web site than for the Directory or ILSs in both years, with more than half of the surveyed museum visitors in both years reporting awareness of the site, according to the Technology Awareness Survey. Evidence was unavailable to make observations about changes in awareness by visitors who had not used the Web site.
- **Use:** The 2003 Visitor Survey showed an increase, though not statistically significant in the percentage of museum visitors who said they had visited the Web site in the past year (44 percent in 2003 versus 30 percent in the 2001 Visitor Survey). Other data sources revealed a similar pattern in Web site use over the project period. However, Web survey results showed a significant increase in the percentage of Web site visitors who said they spent 20 minutes or longer on the site. Also, significantly more first time users used the Web site in 2003 (61 percent, compared to 42 percent in 2002). Analysis of Web statistics revealed that Web use increased by 50 percent from 2002 to 2003, an annual rate of change consistent with historical patterns for the site. It is impossible to know what the rate of change would have been without the enhancements to the site.
- **Satisfaction:** Change in satisfaction is unclear. Overall satisfaction among Web Survey respondents remained unchanged from 2002 to 2003. However, a significant increase in the number of surveyed visitors said the information presented was "extremely current" in 2003. Most visitors (70 percent in each year) said that they found the site "extremely" or "very" easy to move around in. Another possible indicator of increased satisfaction are navigational changes made to the site that were based on preliminary Usability Lab results indicating the most challenging aspects found by users. Logically, by improving these elements – as was done in the redesign – satisfaction would increase.

Information Sharing Findings

Findings related to the fifth project outcome – increasing awareness of and knowledge about strategies and techniques that provide visitors information through digital media – are difficult to catalogue because much dissemination is planned for after this report. Through papers, presentations, meetings, and other forms of peer-to-peer communication, Museum staff plan to share what they have learned in a way that will benefit the larger museum community. The dissemination activities completed to date include:

- Presentation of interim reports at:
Museums and the Web Conference, Charlotte, NC. March 2003;
American Association of Museums Conference, Portland, OR, May 2003; and
International Cultural Heritage Informatics Meeting (ICHIM) Conference, Paris, France, September 2003.
- Peer-to-peer communications with representatives of art museums, such as the Getty Museum and the San Francisco Museum of Modern Art in 2002 and 2003. Peer-to-peer communication continues to the present and will be ongoing; and
- Article in *Arts Magazine*, MIA membership publication, 2003.

Scheduled presentations include:

- *Web-Wise, IMLS Conference*, Chicago, March 2004;
- *Museums on the Web 2004 Conference*, Washington D.C. March/April, 2004; and
- *Museum Computer Network (MCN) Conference*, Minneapolis, MN, November 2004.

UNINTENDED IMPACTS

Apart from documented progress toward the project's stated goals, the evaluators noted great progress in many unforeseen areas.

Sustainable improved technological and organizational capacity. During the two years the development of technological knowledge and skills built organizational capacity. Changes in knowledge and skills are sustainable, in that additional resources are not needed for continued operation. Technological improvements and research may incur some cost in the future for continued learning. But these costs remains small in comparison to those of other projects that add staff members but leave little else beyond increased work completed and added personnel costs once grant funding ends. Knowledge, skills and improved functioning remain.

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Research-related learning. Over the course of the project, the evaluators noted a vastly increased capacity by museum staff to make decisions based on data. From the very beginning, staff embraced the opportunity to learn to construct a logic model and evaluation plan. A logic model development process is often frustrating for first time users. A few team members admitted early that they questioned the usefulness of the logic model process. About halfway through the project, all team members constantly referred back to the logic model and evaluation plan. Throughout, the team showed a remarkable willingness to learn, to test and to explore. As one staff person said, “We’ve all been to Evaluation University.” Another staff member noted that they were breaking new ground in museum planning: “Art museums in general do not do research this way.” The success of the *What Clicks?* Project has motivated staff to continue researching and evaluating. The Museum has just received a grant to increase its capacity to perform in-house visitor surveys.

Collaborative learning. Museum staff also showed enormous growth in their capacity to work collaboratively as a part of this project. Several spoke of how they had learned the value of teaming and organizing with the right people to meet goals. Many also spoke of “breaking down department walls.” All agreed that future projects would include collaborative teams. As the project progressed, the team found that wider staff involvement in product development led to stronger products. They found this to be true not just within their own team, but Museum-wide. For instance, they noticed that enlisting guards and volunteers to assist with increasing awareness contributed to better-informed and more satisfied customers. These same guards and volunteers who have constant contact with the visitors also held critical information about visitor needs and perceptions that were invaluable to redesigning the interactive media.

Project theory. Project staff developed a theory that increased awareness of the Museum’s interactive media would lead to increased use, which would in turn lead to increased satisfaction. The *What Clicks?* project was based on this theory of expected results. Data results, however, indicated that this theory is flawed. The research findings contradict the theory. In two areas, increased awareness did not lead to increased use or satisfaction. When awareness and satisfaction increased as demonstrated in the Directory, use remained the same. These conflicting findings suggest that the relationship between the three components is more complex than described in the theory. Other variables outside of the project’s vision or control may influence use more than awareness and satisfaction.

CONTRIBUTING FACTORS

Many factors contributed to the progress discussed in this report.

General Factors

- **Intensity of the intervention is related to effectiveness.** Although enhancements were made to many media elements, including the ILSs, the Web

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site and the Directory, the greatest increase in visitors' awareness and satisfaction was related to the Directory, where the most complete redesign was undertaken. Significant visible changes, such as adding an attract video, bigger and brighter screens, and keyboard and mouse access, along with improved functioning were key pieces of this redesign.

- **Data driven decisions result in quality products and processes.** The evaluation of this project provided the opportunity for Museum staff to use data to direct planning and implementation. As stated in the Cincinnatus report, team members believed that the pre and post data helped to identify and fulfill an unmet need, namely to provide visitors with the ability to easily locate art in the museum. After early data indicated that this was a primary desire of users, an Art Locator function was added to the Directory, resulting in 25 percent of 2003 surveyed visitors reporting that they used the Directory to find a specific work of art. The team also added that the early evaluation work of developing a logic model and evaluation plan helped them sharpen their focus, crystallize ideas and shape strategies that were most likely to result in the expected outcomes. The evaluator observed during this process that several Museum staff members were initially anxious about stating outcomes for which they would be held accountable. Over time, the attitudes shifted from fear to learning. Staff members agreed that the process of continuous learning will move beyond the *What Clicks?* Project to enhance overall Museum effectiveness.
- **Visitors prefer information that relates to their immediate need.** For instance, many surveyed visitors reported that they do not want to see a calendar of events for an entire week, but only for the particular day. As one staff member commented, "We're doing a better job of assessing what the visitor wants to know and giving them that information."
- **Museum staff commitment to visitors' quality museum experience.** Throughout the *What Clicks?* project staff members contributed many hours from already busy work schedules, took risks in experimenting with new and unproven strategies and creatively reduced barriers to interactive media access and use. All the while, enhancing the quality of the Museum experience for the visitor drove planning and implementation decisions. Serious effort and extensive resources were committed to learning visitor preferences, which became the basis for the redesigns. Timelines were extended when tasks took longer than planned. When curators were shown data about visitor preferences, they put aside some of their historical positions to enhance visitor experience. The *What Clicks?* team's interest in pursuing research-based and collaborative interactive media development indicates continued commitment to the visitor's experience and strong leadership.

Directory Factors. Baseline survey results indicated that surveyed visitors had several preferences regarding the Directory design, including:

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- **The Directory should contain current information;**
- **The Directory should be user-friendly;**
- **The Directory should help visitors to locate a specific work or type of art;**
and
- **The Directory should be visible.**

Interactive Learning Station Factors. Museum staff learned that three key elements were most likely to increase awareness and satisfaction.

- **Visibility of interactive tools makes a difference.** Data collected during the *What Clicks?* project confirmed that the location and architectural design of ILSs directly influenced visitor awareness. Specifically, surveys revealed that visitors wanted the ILSs to be kept right in the galleries in close proximity to the art. Analysis of ILS touch-total statistics confirmed that the most visible ILS had the greatest use.
- **Visitors appreciate small video displays (LCDs) throughout the galleries.** Six LCDs installed experimentally in several of the Museum's galleries enhanced the visitors understanding and appreciation of the works of art, focus-group participants revealed. As the Cincinnatus report pointed out, "In some cases the displays filled what visitors described as a gap between the general information displayed on signs and the labels for specific works of art." Very few visitors reported that the video displays detracted from their Museum experience.
- **Visitors prefer large screens,** according to ILS and Directory surveys and LCD focus-group results.

Web Site Factors. Several factors improved the visitors' Web experience, including:

- **Usability Lab testing is critical to identifying barriers and challenges faced by Web visitors.** As the Cincinnatus report notes, this is especially true for a large, content-rich site such as artsmia.org. A number of navigational challenges were discovered from Usability Lab results, including that users were confused by the relationship between several aspects of the site; they had difficulty navigating back to the home page; and they had difficulty using the image zoom control.
- **Language needs to be user friendly.** The Web site Usability Lab study revealed that many users were not familiar with Museum terminology. As the Cincinnatus report notes, "There was substantial confusion about how to find programs for young people because the site did not use common terms such as 'children' or 'kids.' Visitors did not understand that the term 'public programs' refers to the

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many lectures and similar events open to the public.” Visitors also preferred the term “Calendar” to “Events.”

Marketing Factors. A key part of the *What Clicks?* project was the MIA Marketing Department’s initiative aimed at generating more public awareness of both the Museum and its Web site. This campaign included hiring a consultant, purchasing on-line advertising, printing collateral pieces and generally enriching publicity efforts. This provided the Marketing Department with a unique opportunity to test out marketing strategies and to learn which work and which do not work for their purposes. Marketing staff as reported in the Cincinnati report determined the following factors to be critical to increasing awareness, use and satisfaction of Museum services.

- **Targeted advertising messages to targeted audiences deliver the greatest results.**
- **The best on-line ads have compelling images and messages, include a call to action and incorporate color.**
- **Bigger on-line ads, including “skyscraper” or “tower” ads, do best.**
- **Movement in on-line advertising turns off some viewers; it also requires a large amount of file space.**
- **For in-house marketing department with limited Web marketing experience, the help of full-service ad agencies with required experience is worth the money.**

CHALLENGES

- **Increase use.** The greatest challenge facing the *What Clicks?* project is determining what will increase use of interactive media. While the project was unable to discover effective ways to increase media use, the project eliminated many believed-to-be-effective strategies. Knowledge about the emerging field of interactive media in museums substantially grew. The project gave the Museum staff an opportunity to move along the continuum of learning, and led them closer to knowing what is likely to work to increase use. The Museum is well poised to implement the lessons learned from the *What Clicks?* project and continue to redesign interactive media and marketing using the proven strategies.
- **Useful research.** How effective is it to research visitor preferences for features Museum visitors have not used or seen? The Museum staff will be continuously challenged to use existing data to determine future visitor needs. Learning about current preferences is a good but limited first step. Museum staff learned in this process that intentions and preferences do not necessarily result in the same behavior.

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In addition, Web site traffic growth rates are difficult to evaluate. While there was no increase in the growth rate of visits to artsmia.org over the two years – the rate held steady at 50 percent per year – it is impossible to know what this rate would have been had the redesign not taken place.

- **Sustainability.** Collaborative planning and implementation results in strong products and processes but is costly. Museum staff in the *What Clicks?* project creatively found several inexpensive ways to research and learn. The project team was committed to collaborative decision making and developed an effective subcommittee structure to reduce time. In these challenging economic times, when arts organizations are asked to do more with less, Museum staff will be challenged to continue to practice collaborative and data-driven decision making.

As with any project that increases staff knowledge and skills, the success of *What Clicks?* leaves on-going challenges. As staff change the Museum will need to select people who already have the needed knowledge and skills, or train them. The Museum should recognize that their newly achieved level of technological, marketing and organizational capacity is rare in the arts and museum fields. Training and ongoing reinforcement and support will be needed to sustain both the learning culture and interactive media development.

CONCLUSION

The *What Clicks?* project furthered the Museum's use of interactive media to enhance the visitor's experience. By responding to visitors' observations, Museum staff targeted changes and improvements aimed at increasing awareness, satisfaction and use of the media. This evaluation found that awareness grew for the Directory, ILS and www.artsmia.org. Several data sources clearly demonstrate that users are very satisfied when they use the interactive media. Increasing use remains a sizable challenge. In addition, the project's process of collaboration and research-based decision making created a climate of learning that is likely to enhance the future planning and implementation of Museum projects beyond interactive media. Several factors contributed to the project's outcomes, particularly visibility and close proximity of technology-based resources to the art works, user-friendly language, intervention intensity, Museum staff's leadership and targeted marketing. The learning resulting from the *What Clicks?* project well positions the Museum's continued successful development of interactive media as a means to enhance its visitors' experiences.