
WHAT CLICKS? THE MUSEUM DIRECTORY

Background

The Minneapolis Institute of Arts provides visitors who enter the building with stationary electronic directories to orient them and provide answers to common questions that a visitor might ask. The MIA's Museum Directory was first installed in 1990 with a grant from a museum trustee. The original Museum Directory as well as the updated 1994 provided information that would be typical of a printed museum brochure. The Museum Directory provided extensive information about the museum and was helpful in an era when the museum had no Web site. Eventually, this information was



Prior to August 2003, the Museum Directory was available only through these three interactive touchscreens

transferred to the MIA's Web site and augmented by additional content, so that when the *What Clicks?* project began, museum

staff realized that the context for the Museum Directory had changed dramatically. Because the Web site is available to external audiences for more comprehensive information, in-museum users were more interested in the Museum Directory as a source of information for what they needed to know at a particular moment in time, to support their current museum visit.

In August 2003, the Museum Directory was enhanced both programmatically and technically, providing mouse and keyboard input. A lobby video loops continuously near the installation, welcoming visitors to the museum.



Today, the MIA's Museum Directory consists of five touchscreens that are used from a standing position or from a wheelchair. Three of the screens are located in the inner lobby at the museum's most frequently used entrance. These screens are mounted directly into a curved pearwood wall rather than installed as freestanding kiosks. (The additional second and third floor Museum Directories *are* freestanding kiosks.) The Museum Directory's contents include information about



special exhibitions, permanent collection galleries, lectures, films, Family Days, tours, membership and amenities, such as restrooms, coat checks, and cafes. Prior to the Museum Directory's redesign, visitors activated it solely by touching the screen. Because of new functions that respond to user input, the new design includes keyboard and mouse access in addition to the touchscreens.

The Museum Directory was identified early in the project as a prime candidate for evaluation and potential redesign and enrichment. The Museum Directory was viewed as a key visitor portal to all that the museum has to offer. The *What Clicks?* project team reasoned that if the Museum Directory is used by a large percentage of museum visitors and they have a positive experience, it is likely that the quality of their overall experience in the museum would be enhanced. At the time the study began, the museum's technology staff had been considering a number of possible enhancements.

Evaluation Approach

As is true of all the technologies, the project team employed multiple tools to evaluate the Museum Directory. The following museum visitor surveys included questions related to awareness, use and/or satisfaction with the Museum Directory: 2001 Visitor Survey, 2002 Technology Awareness Survey, 2002 Museum Directory Survey, 2003 Technology Awareness Survey, 2003 Museum Directory Survey, and the 2003 Visitor Survey. (Detailed descriptions of methodology are provided in the Appendix to this report.) In addition, museum staff analyzed user statistics to determine trends in usage. In the late stages of the Museum Directory redesign, MIA staff conducted

an on-site usability lab study with assistance from Target Corporation.

What We Learned About the Museum Directory in 2002

The 2002 baseline surveys confirmed what MIA staff had suspected: Many visitors to the museum were not very aware of the existence and purpose of the Museum Directory and, naturally, many were not using it. Following are key findings in 2002:

2002 Findings Related to Awareness

- Only 35% of visitors entering the museum reported awareness of the Museum Directory.
- Museum Directory awareness was far lower than awareness of most other museum features.
- Museum Directory awareness was similar to awareness for the museum's library, which has more specialized use.
- Nearly all visitors became aware of the Museum Directory because they simply saw it during a visit.

2002 Findings Related to Use

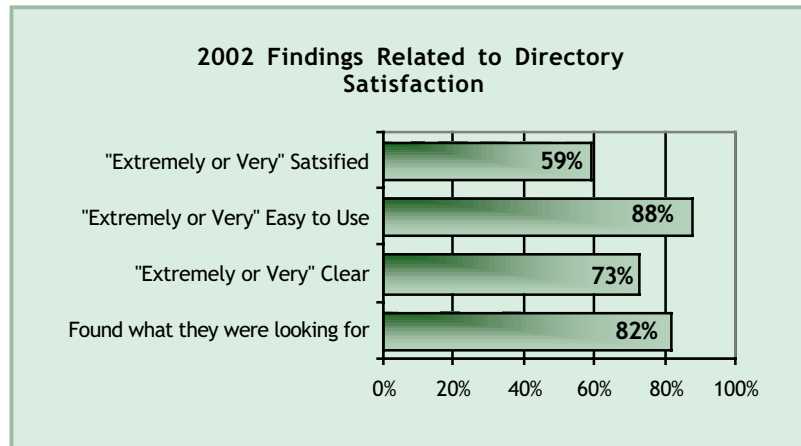
- About 1 in 5 visitors reported that they had used the Museum Directory on any previous visit.
- Museum Directory users were motivated by a need for information about a specific exhibition or event or because they wanted a general overview of galleries and exhibitions.



- Repeat use appeared low. Nearly half of non-users didn't see a need to use the Museum Directory again because they already knew their way around.
- A total of 59% of Museum Directory users said they were first time users.
- Duration of use was generally 2 to 4 minutes.

2002 Findings Related to Satisfaction

Satisfaction with the Museum Directory was high across several variables, as reported in the following graph.



Source: 2002 Museum Directory Survey

When asked how the Museum Directory could be improved, users most often asked for:

- An art locator
- A daily events calendar
- More information about current happenings
- Additional Museum Directory locations

What We Did to Enhance the Museum Directory

As a result of the baseline research, the *What Clicks?* project team concluded that the Museum Directory should be made more visible, more understandable (as to function) and more satisfying as an immediate aid for the current visit. Consultants to the team recommended that the Museum Directory be renamed and repositioned to reflect its purpose, e.g., "Today at the Museum," and that the Museum Directory's physical installation be redesigned to make it more visible and enhance usability.

The team decided to graphically redesign the Museum Directory's interface and to reorganize the content to emphasize information the visitor needs to enhance the current visit. The team also decided to add an "Art Finder" function, enabling visitors to locate works of art on view through searching and browsing the collection database. Information about future events was placed at a deeper level so that information about what was currently happening stood out.

Major Directory Changes

Added video screen to attract users

Switched to bigger, brighter screens

Added key boards

Created "Art Finder" function

Included more information to plan a visit

Integrated with other museum databases

Installed more Directories throughout the museum

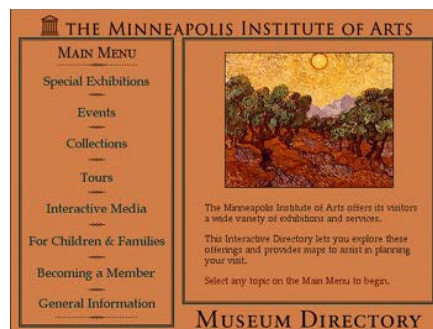


The team believed that the “Art Finder” would answer one of the most frequently asked questions of museum staff and would be especially useful for students with assignments to view and write about specific works of art. The team also decided to test additional Museum Directory locations throughout the museum, e.g., near elevators or at another entrance as a way of enhancing the visitor experience beyond the main entrance and to learn more about how the Museum Directory might be integrated into a planned museum expansion.

The Museum Directory Redesign Process

Enrichment and Redesign Team—The first step was to create a team consisting of representatives from the following museum departments: Visitor and Member Services, Marketing, the Interactive Media Group, and the Curatorial Division. This team was charged with the task of shaping a vision for a new Museum Directory program.

Program Redesign—Based on the team’s work, museum staff created a new Museum Directory that emphasized “Today at the Museum” and contained four sections: 1) Exhibitions, 2) Tours, Events & Activities, 3) General Information, and 4) an “Art Finder”. The team converted the Museum Directory from



The Museum Directory interface in its former state—prior to redesign under *What Clicks?*

a traditional multimedia program to a Web-based system and tied it to the same event database that informs the museum’s main Web site. The database information ensures consistency between the Museum Directory and the Web site, and eliminates

duplication of data entry efforts.

The new “Art Finder” feature enables visitors to look for works of art in multiple ways, including browsing, searching for a specific artist, searching for a specific type of art, searching by place (country of production), and by gallery within the museum. This was achieved by tapping into another database: the museum’s collections management system. The “Art Finder” gives visitors an opportunity to search for art in a number of different ways and frees up VMS staff to do other things. The redesign also integrated a new map system to help visitors find exhibitions, events, and individual works of art. Finally, the program was given an entirely new “look” that was more consistent with the MIA’s current image.



The Museum Directory interface as redesigned based on visitor and staff feedback, fall of 2003.

Physical and Hardware Changes—Visitor usability was enhanced from a hardware standpoint by installing bigger, brighter screens and faster, more modern computers. Given the more interactive nature of the new program, it was necessary to



add a keyboard and mouse to the computer installations. Although the group considered removing the screens from their current pearwood wall so that they could be installed in a more visible way, the museum director recommended they retain the classic, sleek look, maximizing the impact with minimum expense. Another physical change to the lobby area was the removal of a display known as the Daily Events Monitor, which became obsolete with the Museum Directory redesign.

Lobby Video—The Museum Directory redesign team was very concerned about the visibility of the Museum Directory to visitors entering the museum. Baseline research in 2002 demonstrated that many users simply did not see the Museum Directory. However, when the decision was made to retain the existing wall installation due to cost considerations, the team was faced with the challenge of making the Museum Directory monitors more visible in some way other than moving them. Ultimately, the team decided to install a lobby video. The video provides a continuous loop of moving imagery



A new video was installed in the Museum Lobby in August 2003, serving both to welcome visitors to the museum and to draw attention to the redesigned Museum Directory (not pictured).

showing people engaged in various activities within the museum. This attracts the visitor's attention to the Museum Directory and provides a preview of the galleries. Earlier research proved that visitors are attracted to the bright moving images of a video, and that appeared to be the case for this video, based on observations by museum staff.

Database Linkages—While not visible to the Museum Directory user, museum staff also made important changes to enhance the program's efficiency for staff who enter and update information. The program was designed to draw from existing databases (the Exhibitions and Events Database and TMS, which is an art collections management database.) This change eliminated the need for redundant and sometimes inconsistent updating. To greatly enhance delivery speed and make the Museum Directory more robust in the event of a Web outage, museum staff installed an on-site proxy server, which caches frequently used pages.

Auxiliary Directories—Because The Minneapolis Institute of Arts is planning a major museum expansion, the team considered the question of whether additional Museum Directories should be located throughout the museum. The need for additional Museum Directories was also raised in the 2002 Museum Directory survey, when 17% of users recommended additional Museum Directories. The team identified two additional locations for Museum Directories, on the second and third floors. These auxiliary Museum Directories had just been installed as this report was being written. A study has been designed to evaluate visitor use and satisfaction with them, even though results of that study could not be included here.



Usability Testing—At a mid-point in the development of the new Museum Directory program, museum staff tested its design and function with assistance from the Target Corporation Usability Lab staff. (The 2002 Usability Lab study of the museum’s Web site had been an enormous help in providing direction for the Web site redesign, and the IMG reasoned that this tool could be of value in the Museum Directory redesign as well.)



In May 2003 a test subject tries out a concept model of the redesigned Museum Directories. Pam Boehmer of Target Corporation (center) facilitates.

In May 2003 a test subject tries out a concept model of the redesigned Museum Directories.



MIA staff recruited five individuals from the museum’s membership database and intercepted an additional 20 visitors at the front entrance and asked them to perform a series of tasks on the newly redesigned Museum Directory. Evaluators were given a small gift as a token of appreciation. This simple, weekend study yielded several insights for improvement and confirmed that the Museum Directory redesign was basically on track.

Visitor and Member services (VMS) staff as well as Security personnel were interviewed during redesign and planning. They confirmed that visitors’ number one question is “Where can I find a particular work/type of art?” In fact, students often present a list of objects they are seeking, as part of a class assignment, to VMS staff. Visitor habits were revealed in these interviews to indicate that questions are typically asked first of VMS staff at the main floor Information Desk, then of Security personnel deeper into the museum’s galleries. This information led to or confirmed two key decisions: 1) to add an “Art Finder” function to the Museum Directory, and 2) to install Museum Directories in additional locations. Because they most often approach Security guards, it is clear that visitors prefer not to return to the Information Desk or the Museum Directory in the lobby once they are in the galleries.

After six months of enrichment and redesign activity, the new Museum Directory was fully installed in its main location in August, 2003, just prior to the 2003 follow-up surveys for the *What Clicks?* project. The second and third floor Museum Directories were installed in December, 2003.



Results of the *What Clicks?* Effort

The *What Clicks?* follow-up studies demonstrated conclusively that the Museum Directory enrichment and redesign effort had been highly successful. Many key indicators for Museum Directory awareness, use and satisfaction increased significantly from the 2002 baseline measures.

2003 Awareness Results

Total awareness (unaided and aided) increased from 35% in 2002 to 44% in 2003, a notable increase of 9%.

Total Awareness

	2002	2003	Difference ('03 vs. '02)
Library	34%	32%	-2%
DIRECTORY	35%	44%	+9%
Interactive learning stations	43%	53%	+10%*
Arts magazine	52%	54%	+2%
Web site	54%	59%	+5%
Events such as Art in Bloom	63%	64%	+1%
Member events	64%	69%	+5%
Arts Break coffee shop	72%	79%	+7%*

Source: 2002 and 2003 Technology Awareness Surveys (total unaided and aided awareness)

* Significant @ .95 or better

2003 Results Related to Museum Directory Use

- Museum Directory users reported using the Directory for longer periods of time. A total of 39% reported using it for 5 minutes or more vs. only 15% in 2002. It is likely that the more pertinent Museum Directory content is holding user interest for longer periods.

How Long Did You Use the Directory?

	2002	2003	Difference
More than 9 minutes	2%	7%	+5%
5 to 9 minutes	13%	32%	+19%
2 to 4 minutes	58%	49%	-9%
1 minute or less	28%	13%	-15%

Source: 2002 and 2003 Museum Directory Surveys

- A total of 24% of Museum Directory users said they were motivated to use it “to find a specific work of art,” which suggests that the addition of the “Art Finder” function was a very positive improvement. (This choice was not listed in the 2002 survey.)
- The percentage of Museum Directory users who said they were first time users appeared to increase (69% vs. 59% in 2002), which would indicate that efforts to draw attention to the Museum Directory (attract video, larger and brighter screens) were successful. This increase, however, failed to meet tests of statistical significance.



- Similar to 2002, 4 out of 5 Museum Directory users become aware of the Directory because they saw it on a museum visit, confirming that the best way to attract users is to draw their attention to its physical location.
- There was a slight increase in the percentage of visitors who reported that they had used the Museum Directory (+1%) but the change did not meet a test of statistical significance.
- As in 2002, the primary reason users do not use the Museum Directory is that they do not see a need for it and/or feel they know their way around (63% of non-users in 2003). However, because the Museum Directory redesign was completed shortly before the follow-up survey, there was little time for visitors to become aware of the Museum Directory's enhancements on previous visits.

Positive Changes to the Directory

Increased overall awareness

Increased duration of use

Increased overall satisfaction

Increased clarity of information

More found what they were looking for

Users could locate works of art

More staff time available for other work

2003 Results Related to Museum Directory Satisfaction

- Overall satisfaction with the Museum Directory improved dramatically from 59% of users in 2002 to 77% of users in 2003 reporting they were “extremely or very” satisfied.

Key Satisfaction Measures for 2002 and 2003

	2002	2003
Extremely/very satisfied	59%	77%
Extremely/very easy to use	88%	87%
Information extremely/very clear	73%	86%
Found everything they looked for	82%	92%

Source: 2002 and 2003 Museum Directory Surveys

- The percentage of Museum Directory users who felt the Directory information was “extremely or very” clear increased dramatically, totaling 86% in 2003 versus only 73% in 2002 (significant @ .95).
- More Museum Directory users in 2003 said they found what they were looking for; a total of 92% vs. 82% in 2002 (significant @ .99).
- High percentages of Museum Directory users in both years reported that they found the Directory “extremely or very” easy to use; 88% in 2002 and 87% in 2003, a change that was not significant.



The *What Clicks?* project team believes the Museum Directory redesign is a major step forward. The Museum Directory provides a more effective and efficient tool for visitors and better connects them to art and art information. The availability of the Museum Directory saves staff and volunteer time that would be spent directing visitors to the art. The new database-driven system not only saves staff time but also reduces the likelihood of incorrect information. Importantly, museum staff have a much better idea of how people use the Museum Directory and why, which is valuable knowledge for the future.

Future Directions for the Museum Directory

As the *What Clicks?* project draws to a close, MIA staff will continue to focus on two activities related to the Museum Directory:

(1) MIA staff will continue to explore the impact of the Museum Directory redesign in the future with small focus groups and self-administered questionnaires as a measure of formative evaluation. Additional improvements in many awareness and use measures are anticipated over time, as more visitors become aware that the Museum Directory has become a richer resource for timely and valuable information related to their visit, and the physical changes boost visibility. Museum staff will continue to monitor satisfaction and continuously look for ways to enhance the Museum Directory's program.

(2) MIA staff have installed and will evaluate the use of two additional Museum Directories, one each on the second and third floors. In both 2002 and 2003, many Museum Directory users indicated they wanted more Museum Directories

available throughout the museum (17% in 2002 and 16% in 2003). This was the most frequent request, followed by the request for an “Art Finder” and a Daily Events Calendar. More testing and evaluation will be essential as the Institute moves ahead on planning for its major expansion, slated for completion in 2005.



The Museum Directory is now available in additional interactive installations on the 2nd and 3rd floor of the museum.

