

# Sustaining MedArt: Assessing the Persistence and Longevity of a Pioneering DH Project

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## Abstract

This study takes contemporary user analysis of historical digital objects as a central component of a responsible digital preservation strategy. The direct object of inquiry is a scholarly website, “Images of Medieval Art and Architecture” (<http://www.medart.pitt.edu>), created in 1995 at the very dawn of the World Wide Web. This site continues to serve a global community of scholars who investigate the art and architecture of Western Europe between the eighth and fourteenth centuries, and has become the *de facto* reference standard for study images for this period. Although the web presence has benefitted from some minor updates, the digital object—a time capsule, really—has remained more or less untouched for the past two decades, a period of drastic change in the surrounding digital environment. Using a usability analysis survey that examines the intellectual, aesthetic, and technical elements of this important digital humanities project, this early-stage study reveals the ways in which contemporary functional and aesthetic interactions can identify important preservation criteria that need to be addressed when designing long-term preservation strategies for digital projects that serve scholarly communities. Usability is critical to sustainability in the digital environment.

**Keywords:** digital humanities, digital preservation, knowledge infrastructure, sustainability, user analysis

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## Introduction

Over the past two decades, digital projects serving the scholarly community have accreted at a rapid rate, and yet, there is a surprising paucity of user analyses on their usability, especially over time.<sup>1</sup> The digital humanities are an area of research committed to scholarly engagement, but without investigating the ways in which user experiences change over time, digital humanists unwittingly intimidate or frustrate potential users, and the tools and resources created within their project’s scope run the risk of redundancy or failure. Additionally, and most importantly, the lack of usability analyses also reduces the likelihood of investment in sustainable digital preservation methods. Low adoption rates or inadequate preservation strategies can be devastating for digital humanists, whose pursuits often require the establishment of a unique knowledge infrastructure, developed through the investment of substantial time and energy on the part of multiple players.

Despite a lack of usability attention, some digital humanities tools and websites manage to persist, continuing to receive a particular set of faithful visitors. However, even this loyal group may drift away, as the digital tools or websites grow increasingly alien to a contemporary audience. In a digital environment, this study argues, usability is fundamental to sustainability. Without analyzing this former element, and thereby creating a user knowledge base, successful and responsive digital preservation cannot occur.

This study focuses on a very long-standing digital humanities project, “Images of Medieval Art and Architecture” (<http://www.medart.pitt.edu>), conceived almost two decades ago in 1995. Dr. Alison Stones, now Professor Emerita in the History of Art and Architecture at the University of Pittsburgh, created the MedArt website along with her research associate Jane Vadnal as a means of collecting images and image metadata for pedagogical and scholarly work. The website was initially committed to promoting

<sup>1</sup> On the first page of their 2012 article, “Building Better Digital Humanities Tools: Toward broader audiences and user-centered designs,” Fred Gibbs and Trevor Owens describe the paucity of user studies, indicating that only 14% of tool developers conduct surveys about the tools they develop.

“education and research in Medieval art and architecture,<sup>2</sup>” and has become an enduring scholarly resource. Emerging during the Internet’s infancy, the site has remained surprisingly constant in appearance and functionality throughout the years, but still receives visitors (the site had 240,514 visits between September 16, 2013 and September 15, 2014). It has stayed very much the same since 1995, despite vast changes in the surrounding digital environment.

This study seeks to understand user expectations and engagement with this “time capsule” of a website, and determine how they might inform the long-term preservation strategy for MedArt. It proposes a path towards long-term preservation in the form of a reinterpretation of the project informed by contemporary usability studies. Our early findings suggest that the utility of this resource is fading, in part, because of its stability. This work may also reveal other generalizable principles that other DH projects focused on image sharing in a scholarly environment might be able to use (such as, for example, reinventing the research travel journal).

For the initial stage of this process, we are employing the Qualtrics survey tool, provided through the University of Pittsburgh, to conduct usability testing. The survey, disseminated to both Medieval and Renaissance scholars and non-specialists, requires users to complete two image-retrieval tasks and respond to a total of fifteen questions. The creation and implementation of usability analyses reveal not only predominant features or issues inherent to particular tools or resources, but also expose broader conceptual questions that provide further opportunities for development. At its core, the process of conducting usability analyses requires a thorough examination of project objectives, and also imposes self-evaluation that might otherwise be lacking. This poster reports findings from an analysis of the usability survey responses, and posits potential improvements or alternative formats for the digital content of the website.

## Conclusion

Analysis of survey results, and the discussions that orbit these findings, lead to recommendations for establishing initial DH project infrastructures that balance the use of high-level digital tools and techniques and sophisticated, interactive end-user experiences with the need for content stability over time.

Our preliminary survey responses suggest that self-reported experts of Medieval and Renaissance studies (47% of our respondents) do not find “Images of Medieval Art and Architecture” to be a useful website in its current format. Of these respondents, 62.5% consider themselves to be comfortable with web technologies, yet only 37.5% of this cohort reported that the first task was easy to complete. This may be due, in part, to the fact that the first task required the survey-taker to locate images on the website using a search term that was not actually explicitly incorporated into the site. Furthermore, the site lacks familiar navigational features, so even participants who are comfortable with technology may not necessarily be able to use this website.

If engagement with the website correlates to sustainability, this site is in peril of obsolescence, as even expert scholars find it difficult to use. Indeed, a paltry 29% of the survey respondents reported that the site would be useful at all. According to the premise that usability equates with sustainability, these initial findings suggest that our investigation is absolutely vital to the survival of this website.

This relationship between usability and sustainability will also be key to the large number of DH projects currently aging out of their original technical environment. Projects that were once “cutting edge,” are now seeing some features outstripped by new technologies and other features deprecated or breaking under the intense pressures of digital innovation.

The notion of “computerly” is taken from the art-historical term “painterly,” which describes a work of art whose forms deliberately call attention to the material craft of the painter (visible brushstrokes, heavily-layered paint, using the canvas support as an active participant in the image, etc.). A computerly DH project, therefore, calls attention to the extraordinary affordances that digital technologies, especially web technologies, offer the modern scholar.

## References

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<sup>2</sup> Images of Medieval Art and Architecture, [www.medart.pitt.edu](http://www.medart.pitt.edu).

Edwards, P.N., Jackson, S.J., Chalmers, M.K., Bowker, G.C., Borgman, C., Ribes, D., Burton, M., & Calvert, S. (2012) Knowledge Infrastructures: Intellectual Frameworks and Research Challenges. Report of a workshop sponsored by the National Science Foundation and the Sloan Foundation, University of Michigan, School of Information.

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## Table of Figures

### IMAGES OF MEDIEVAL ART AND ARCHITECTURE

#### MEDIEVAL ARCHITECTURE

© Alison Stones



Mont-Saint-Michel (France)

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In collaboration with the [University of Pittsburgh's Digital Research Library](#), we have developed searchable image databases for [Chartres Cathedral](#) and the [Benedictine Abbey Church of Sainte-Marie-Madeleine at Vézelay](#). The [Chartres](#) database, which contains over 3,000 images, is coordinated with web pages to allow for a more structured approach to these images.

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**THIS SITE IS CONSTANTLY EVOLVING**

**The purpose of this site is to promote education and research in Medieval art and architecture. We plan to expand it by adding more monuments, images, various levels of supplementary information, bibliographical references, and different kinds of cross-links including keyword searching.**

Please select one of the following options:



[England](#)



[France](#)



[Glossary](#)

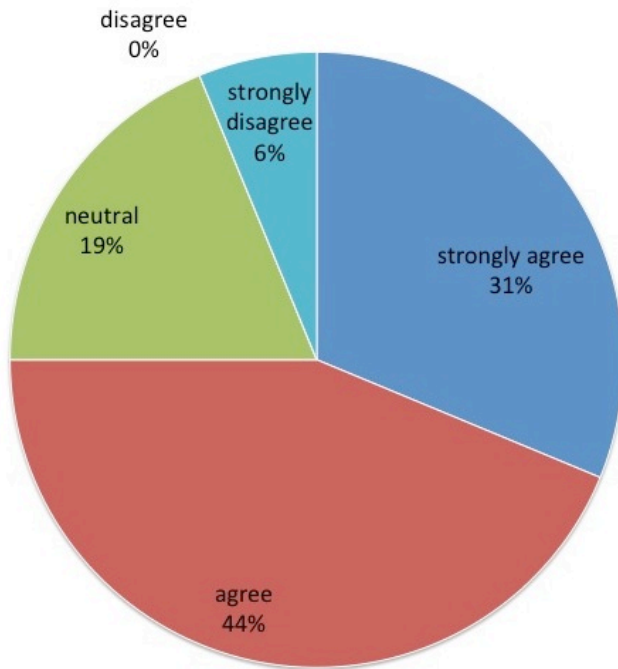
Designed by Jane Vadnal & Philip Maye, 2008

This page was last modified on: 08/10/2010 16:08:33

**Figure 1a and 1b.** Top and bottom half of the homepage for “Image of Medieval Art and Architecture” (<http://www.medart.pitt.edu>), captured on 9 October 2014. Notice that the site lacks any “search”

functionality. Users are expected to click on “England,” “France,” or “Glossary,” and browse each category. See Figure 3 for the distribution of responses to the lack of a search function. 75% of respondents strongly agreed or agreed that it was difficult to navigate the website without a search box.

**I found it difficult to navigate the website without a search box**

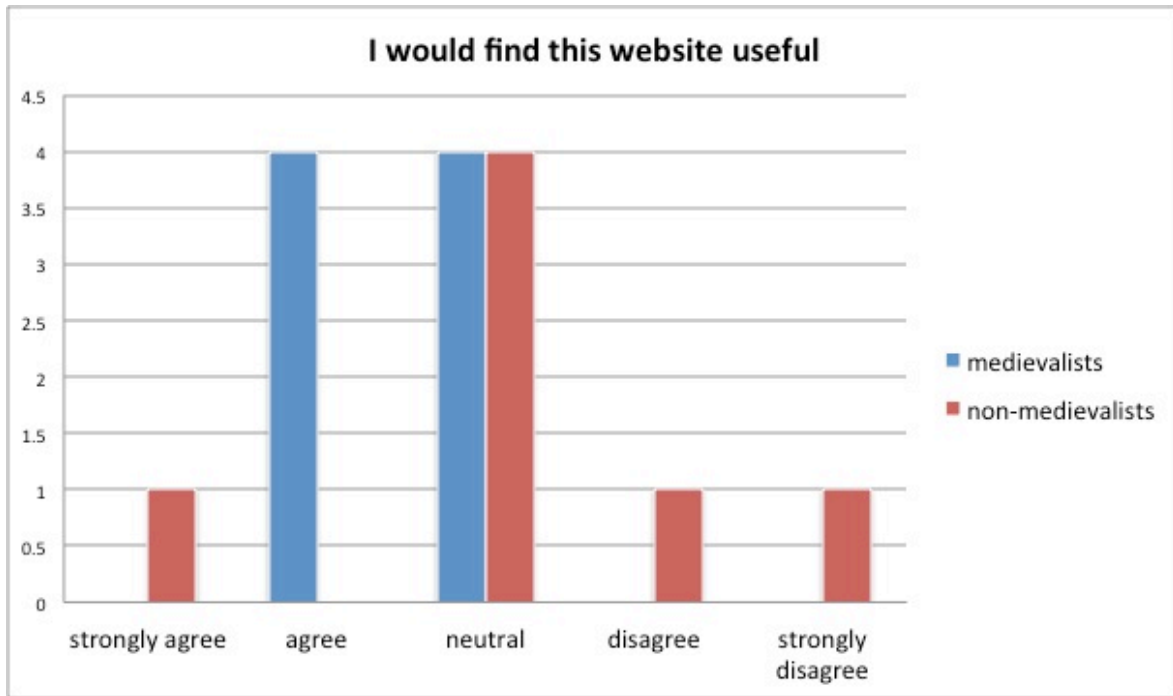


**Figure 2.** Question and responses from survey takers. Usability is evidently a primary concern.

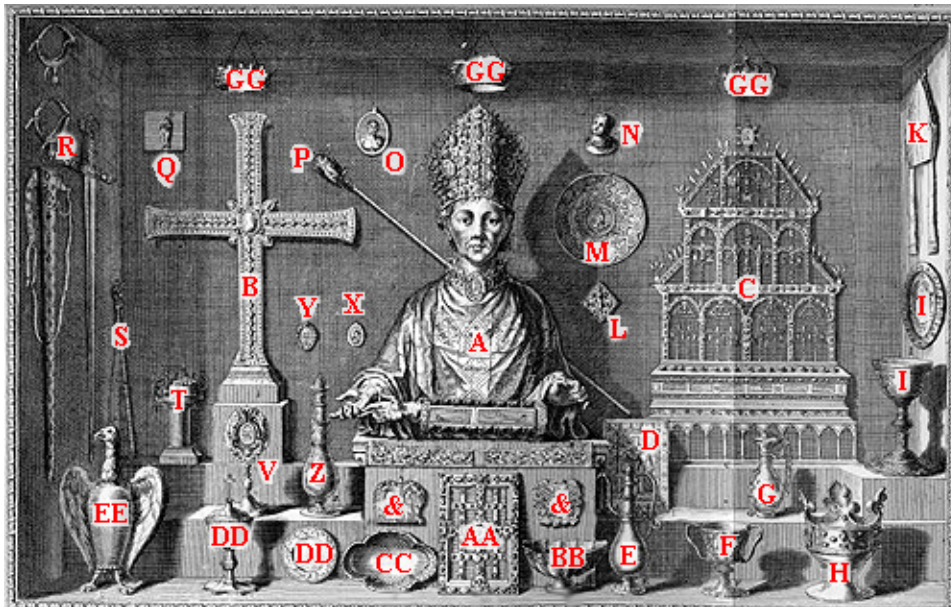


**Figure 3.** For the second task in the survey, respondents were asked to find an image of Notre-Dame. A significant number of respondents found this task to be “very easy” (71%). This is an image of the

Cathedral of Notre-Dame page. "Images of Medieval Art and Architecture," (<http://www.medart.pitt.edu/image/France/Paris/Notre-Dame%20de%20Paris/Note-Dame%20A.html>), captured 9 October 2014.



**Figure 4.** Responses to the statement: "I would find this website useful," distinguished by self-reported level of expertise in the area of Medieval and Renaissance Studies.



**Figure 5.** Félibien Plate IV: The Treasure of Saint-Denis. "Images of Medieval Art and Architecture," (<http://www.medart.pitt.edu/image/France/St-denis/felebien/FelePI4/felibien4.html>).