

# By Nancy L. Maron

f the notion for the past decade in digital humanities investment has been to let a thousand flowers bloom, it seems to have worked. Digital creation is no longer just the realm of specialists, IT developers, and librarians who manage collections. Today, with digital humanities (DH) hitting its stride, historians, philosophers, and poets not only are learning how to use tools to conduct analysis for their work; they also are building collections, developing their own tools, and constructing platforms. Major funding may still come from just a few usual suspects, but academic and cultural institutions are carving out and reallocating funds to create and support the digital initiatives. This democratization of digital creation signals an exciting time, and yet it can pose institution-wide challenges as well.



Scholarly monographs and journal articles have well-defined paths of publication; likewise, libraries and museums have wellestablished methods for cataloging and storing images of objects in their collections. But what about those innovative digital resources that are not quite large enough to be selfsustaining and don't quite fit into traditional models of distribution? They may have required funder and institutional investment, will need ongoing support, and offer great potential for scholars well beyond the campus, perhaps

even beyond the academy. Without a system of support, this type of project can be at real risk of becoming quickly outdated, if not completely lost in the shuffle. What role could or should the higher education institution play in supporting these works?

In 2014, with support from a Digital Humanities Implementation Grant from the National Endowment for the Humanities' Office of Digital Humanities, Ithaka S+R undertook a study of institutional models of support for DH outputs, specifically those larger-scale projects that are intended for public use and that require ongoing support and maintenance.1 In the past year, interest in and enthusiasm for DH-and for digital scholarship more broadly-has continued to grow. University and college libraries are undertaking reassessments of their role vis-à-vis digital work and are asking themselves if they need a DH or digital scholarship center of their own. Some are considering if and how to repurpose physical spaces to support this. In April 2014, the Coalition for Networked Information (CNI) convened a group to discuss Digital Scholarship



We were surprised to learn that nearly half of the respondents reported not just making use of digital tools and collections but also creating or managing them.

Centers,2 and in the spring of 2015, it convened a group of DH center directors and others engaged in this space to discuss various digital center models.3

The Ithaka S+R study involved interviews with 126 project leaders, library deans, and college and university administrators, as well as an in-depth "deepdive" look at four campuses: the University of Wisconsin-Madison, Columbia University, Brown University, and Indiana University Bloomington. Through our interviews and campus work, we soon realized that even though

many campus leaders had thought about different parts of this question, few institutions had fully implemented models that they felt described a comprehensive, end-to-end approach. As a result, rather than simply observe and report on "best practices," we used our study to explore the current state of DH creation on campus and the existing systems in place to support DH. We sought to understand how institutions were handling DH projects: from conception to creation, then on to promotion and dissemination, and finally to ongoing support. Which units on campus currently "own" the different phases of support, and who should? Do the efforts contributed by different groups on one campus add up to a coherent plan for creating, supporting, and sustaining the impact of these works? And what sort of institutional model might best accomplish all of this?

#### Challenge #1:

## **Building an Inventory**

Since 2008, my colleagues and I have been fortunate to speak with hundreds of creators, funders, and managers of digital initiatives. Some are faculty teams

who were practicing DH avant la lettre, like the team at Thesaurus Linguae Graecae, founded in 1972, or at the Stanford Encyclopedia of Philosophy. In 1995 the latter simply wanted an online, updatable encyclopedia, and the team ended up creating a proto-Wikipedia.

Other digital project leaders, including many working in library settings, began with a different set of motivators, whether collection development, greater access, or preservation of fragile materials.4 Still others, often faculty members, may have engaged with DH in the context of their research and teaching: Can this new tool support my research question? How can digital resources created for pedagogical purposes further teaching and learning? How can students learn by producing digital work? All of these are legitimate ways in which technology can help to promote the cause of the humanities, educate students, advance research, and expand the research of scholarship and learning. But these projects were created for very different ends and certainly require different strategies to achieve those ends. Our focus, rather, was on those projects that were created or managed (not just used) by faculty, that were intended for public use, and that were planned to be used and developed over time.

We began by trying to understand the scope of the issue on a given campus. In an earlier and related project, my colleagues and I had made phone calls, sent emails, and literally knocked on doors to ask department heads to identify the digital initiatives in their departments.5 This time, we opted to conduct a survey of all faculty in certain departments. We were surprised to learn that nearly half of the respondents reported not just making use of digital tools and collections but also *creating or managing* them. Of course, creating could simply include developing a database or image collections for personal research projects. But 64 percent of these respondents reported that they intended their digital creations to be primarily for *public use*, and 72 percent reported that they or someone else would

continue to add to or develop their digital projects in the future.

A closer look revealed that although perhaps 30 percent of the reported "public, ongoing" projects were indeed major works that involved both original content and some customized tools-Open Folklore, Virtual Humanities Lab, Saint-Jean-des-Vignes-many appeared to us to be more personal efforts or to have been created specifically for teaching purposes. Even those with a public face were often developed from templates or existing platforms, such as course wikis, virtual exhibits, or a personal collection of research images. Even so, this enthusiasm for creating digital collections suggested to us a greater need for institutions to develop the means to identify which projects require and merit support and the forms that the support might take.

## Challenge #2:

# **Examining the Digital Life Cycle**

What would a comprehensive system of support include? Our previous work had helped us to identify the support stages that digital projects require. Now we decided (1) to identify which units on campus felt they were offering these services to faculty, whether the IT department, library, DH center, or other computing center; and (2) to ask faculty "creators" to tell us where they had gone to get support when developing and running their projects. We asked about the following life-cycle stages:

- Project Planning: the decision-making processes leading up to the creation of a project, from defining the scope of the project to determining who will participate on the project team, reviewing its data-management plan, and discussing sustainability goals
- Content Creation: the creation of original born-digital scholarship and the digitization of images, documents, or other analog materials or the production of content to populate a database
- Technical Development: the programming support to develop databases and to design user interface and any

- tools needed for the project
- Storage: the format and scale of the technical infrastructure that houses the data that makes up the project
- Project Management: the regular oversight of and responsibility for managing and developing the project, not only from its earliest stages but also postlaunch
- *Technical Upkeep:* the ongoing support that most if not all projects will need for technical maintenance and upgrades, whether of the interface, discovery tools, or optimization for search, or for migration to newer versions of tools and platforms
- Preservation: the activities that go into ensuring the long-term stability, integrity, and accessibility of the digital content
- *Dissemination:* the activities related to sharing the finished project with its audience, including the choices of where to host the project and how to strategically alert and engage potential audiences/users

The answers revealed some telling patterns. In some cases, the units that felt they played a key role in certain activities were indeed the same units cited by many faculty as having been the place they went for support in that stage of work. In the case of Brown University, for example, academic researchers almost universally gravitated to the library's Center for Digital Scholarship, whereas those working on course-related projects went to the Instructional Technology Group, housed within the IT department. Patterns at other campuses were less clear, with faculty indicating a multitude of sources of support or, in some cases, having no one clear choice for where to go for help. Certain activities appeared to be without a "home." For example, many faculty indicated that none of the listed departments had helped them with dissemination of the final project. In other cases, some functions, including technology support, were often distributed among several campus units, including the IT depart-

# **Indiana University Bloomington**

n the fall of 2014, Indiana University Libraries launched the Scholars' Commons. The Scholars' Commons is a physical space, built on the ground floor of the Herman B. Wells Library, where students and faculty can seek guidance on their digital scholarship questions. They are first greeted by someone at the reference desk, where intake questions help guide library staffers in which services to offer. The space includes a digitization center, but its core consists of a series of adjacent, glass-enclosed consultation rooms. The real work of the center is getting participants to sign up to host "office hours" on a regular basis. Partnerships with the Center for Survey Research, HathiTrust Research Center, Indiana Statistical Consulting Services, IU Libraries, Office of Research Administration, Office of Scholarly Publishing, Office of the Vice Provost for Research, and University Information Technology Services form the core of the consultation service, with representatives of these units available at posted times.

ment, the library, visualization centers, and academic departments. In the case of preservation, some faculty cited relying on units that themselves do not actually provide this service, prompting those that do to realize that further communication with faculty on this topic may be needed.

#### Challenge #3:

## **Choosing a Model**

With data from our surveys in hand, we held key stakeholder meetings at each of our four deep-dive campuses, offering the opportunity to review faculty feedback as well as gaps and overlaps in service provision. Indiana University (see

sidebar) has put a great deal of thought into articulating a strategy for providing tech support and a baseline of storage capacity for all faculty, as a means of encouraging innovation. Brown University (see sidebar) has clearly delineated roles for key units—with, for example, the library providing services to academic principal investigators working on digital research initiatives and with the Instructional Technology Group in the IT organization supporting digital initiatives for teaching and learning purposes.

In thinking about the examples we saw in action, we identified three models: the Service Model, the Lab Model. and the Network Model. These are more conceptual models than exact blueprints for building a DH center, but they provide a useful characterization of what we noticed in place at many campuses.6

#### The Service Model

Despite heated debate about the degree to which librarians should envision themselves in a "service" role,7 many efforts to create a library-led support effort for DH fall into this category. The motivating factor of a service unit is to meet faculty and students where they are—to offer courses, training, and some programming support for members of the campus community. This often takes the form of developing a full range of programming, from workshops to courses, and bringing in guest speakers. The library or center following this model seeks to identify and respond to faculty needs: what are the emerging tools and methods they need help mastering? Community is a common theme, and many centers make robust efforts to serve as a meeting point to draw together practitioners on campus.

In this model, the library or other lead unit tends to be responsive to the needs of faculty and students, rather than independently identifying a path of innovation. The degree of engagement in creating digital initiatives is dependent on making an appeal for further funding or reallocating existing resources. However enterprising, this "working within means" can make it difficult to hire toplevel programming staff or enough staff. Part of the challenge may be rooted in



The motivating factor of a service unit is to meet faculty and students where they are—to offer courses, training, and some programming support for members of the campus community.

the original mission of the unit. Some who view their role as serving faculty, while participating in a consultative role, either had not wanted or did not want to be seen as charging for these services; several libraries reported that they were not commonly written (financially) into grants.

#### **Brown University**

rown University Library's Center for Digital Scholarship includes DH librarians, social science and scientific data librarians, and members of the Digital Technologies team. A newly created position—Digital Scholarly Services Manager—will coordinate the day-to-day work of digital scholarship including DH. New directions include a focus on digital scholarship and publications, aided by a grant from The Andrew W. Mellon Foundation. This grant allows the center to work more closely with faculty in developing interactive digital publications, to establish new criteria for the evaluation for such works within the university's promotion and tenure processes, and also to create programming, along with the Cogut Center for the Humanities, on new forms of publication. In addition to this shift to new forms of publication, the library is planning to open in 2016 a Digital Studio, a production-oriented space that will be located adjacent to the Digital Scholarship Lab, which has been used primarily as a presentation and teaching space. This shift in focus has been supported by the creation of several new positions: a Digital Preservation Librarian, a Digital Scholarship Editor, and an Information Designer for Digital Scholarly Publications. According to Harriette Hemmasi, University Librarian at Brown: "This is the future of libraries. As the core infrastructure for scholarship, librarians will work side-by-side with faculty and students through all steps of the research process, including the selection and management of resources, the analysis, documentation and design of findings, and the dissemination and preservation of scholarly works."

#### The Lab Model

The lab model differs in several important ways from the service model (see table 1). This is the model followed for years by George Mason University's Roy Rosenzweig Center for History and New Media, Michigan State University's Matrix Center for Digital Humanities and Social Sciences, and others in terms of focus and goal setting. These labs have sometimes resulted from the success and experience of an earlier project. Leaders tend to be entrepreneurial, focus on identifying the next new product/ service, and are clear regarding expectations about how that product or service will be funded, whether through grants and partnerships or a revenue model. They work extensively with partners, chosen strategically for a range of reasons, including providing new sources of funding. What the pure labs do not necessarily engage in is the softer training element or the sense of obligation to the broader preservation and access issues concerning work they do not initiate. Research and development may well be an important element of their work, but training and preservation are not their purview. As Dean Rehberger, director of Matrix, told us, service-oriented centers can fail if they "spend a lot of time doing things on campus ... like speakers' series and supporting faculty.... They end up spending up funds that way, rather than working with others, and finding partners.... You need to grow the projects first, then find money for them."8

#### The Network Model

Both the service model and the lab model tend to assume that one specific unit on campus—whether the library, the IT department, or a DH center—will take the lead in setting up systems for whatever sharing, service provision, and standards will be adopted by digital projects. But is it reasonable to expect a library to become, overnight, a center for new product development? Is it fair to expect that a DH lab should take responsibility for sustaining DH work done elsewhere on campus? Probably not.

TABLE 1. The Service Model vs. the Lab Model

	SERVICE MODEL	LAB MODEL
Primary Motivation	Meeting faculty and students where they are; offering faculty and students basic training in new techniques; developing a DH community	Being an innovator in digital tools, collections, and platforms
Direction-Setting	Services are offered to suit the needs of faculty and students on campus	Partners and new directions for development are identified
Staffing	Often run by library staff, as schedules allow; some staff may specialize in certain digital methods, such as GIS and text mining	Developers, project and product managers, UX specialists
Revenue Sources	Library budget	Grant funding; consulting fees
Activities	Training, workshops, consulting, coaching in new methods	Project-oriented work to build digital initiatives; consulting
Capacity	Current staff work within time they have available	New staff can be hired as new projects are funded

Given that on many campuses, various units have developed over time with different areas of expertise, wouldn't it make sense to find ways to combine these strengths? Rather than having one unit "own" the support of DH work, why not weave together a strong system of end-to-end support by drawing together the infrastructural and human capacity from these many players?

This suggests a network model, which may consist of a strong central hub, like a library or a DH center, with many spokes, or it may consist of an array of various units, none dominant, pooling resources across campus-and indeed, many interviewees suggested that the network model was their ideal. The aforementioned Scholars' Commons at Indiana University Libraries illustrates the "hub and spoke" network model in action, and there seems to be real promise in this structure, especially when the heart of activity for DH scholarship on campus is already located at a library, IT unit, or DH center. The lead unit can serve as a point of coordination and sometimes as a physical space to draw units together,

whether the aim is "service" or innovation. Having a clear starting point gives an institution a chance to grasp the full range of the work that is taking place and to establish contact with digital creators early enough to encourage them to use existing platforms, to work with established standards, and to deposit digital assets, where possible, into institutional repositories and management systems.

Examples of the more egalitarian "network of equals" model in practice were hard to find, though many cited its appeal. Given the strained finances of many institutions, combining existing resources can seem like a pragmatic step before making heavier investments in new programs or positions. In one case, a vice provost had outlined a plan to draw together resources scattered throughout the campus as a means to efficiently maximize the impact without additional new investment.

Defining the terms of the collaboration is very important. This type of structure requires buy-in from the various campus partners, and without strong direction, it can easily falter. We heard several theoretical examples of



how attempts failed for lack of direction or funding. Even though the campus partners may truly want to see this work, if the work is not paid and the terms are not clearly defined (which staff? how many hours? which projects to take on?), the collaboration can too easily fall to the bottom of a list of other priorities.

Although a fully operational example of a "network of equals" seemed elusive, we did observe efforts to build a wider net of support-sometimes by slowly linking just two units at a time—in order to better support researchers who are not affiliated with DH units. At the University of Wisconsin-Madison, a grassroots effort by faculty and some staff has led to the construction of a network out of various pockets of support around campus and has received the attention of some senior administrators who may be able to help reinforce that network. At the University of Maryland, the library and the Maryland Institute for Technology in the Humanities (MITH) have key shared staff, along with an understanding that although MITH focuses on R&D, it provides some support to the library's digital stewardship unit for assistance with projects postlaunch.

## Conclusion

Why does an institution need to concern itself with managing the digital outputs of faculty and staff? The institution, or especially the library, may view doing so as part of its mission to protect and support the digital assets. Financial and technology officers may believe that if the project lacks coordination, the project leaders getting the greatest share of resources (e.g., developer time) tend to be those who ask first or loudest. It also may be that the provost or even the president sees that digital resources in the humanities offer a unique opportunity to share the fruits of academic work with a worldwide audience.

Whatever the motivation, devising a strong end-to-end strategy requires coordination among many players who see the benefit in working together. Librarians are likely to feel most strongly about issues concerning collections, preservation, and access to information; in many ways, their central role and function make them a natural starting point for new project leaders. Technology centers, visualization labs, and even academic departments with computational strength are likely to hold the greatest capacity and developer expertise; innovation and research are core values of a research university, of course, but the market-aware approaches of DH labs, public history/humanities efforts, and even scholarly publishing offices have a great deal to offer in the equation as well.

If no one unit on campus can take on all of these roles, perhaps the best hope is for a unified strategy that draws from the expertise of several units. A comprehensive plan that guides project leaders to build digital resources, that takes on the challenge of identifying and reaching out to the audiences who care, and that develops methods for preserving the digital assets will be the best hope for making sure that the seeds planted today will result in many more thousands of flowers blooming for years to come.

#### Notes

1. Nancy L. Maron and Sarah Pickle, Sustaining the Digital Humanities: Host Institution Support beyond the Start-Up Phase (Ithaka S+R, June 18, 2014), http://www.sr.ithaka.org/sites/default/files/

- SR\_Supporting\_Digital\_Humanities\_20140618f .pdf.
- 2. Joan K. Lippincott and Diane Goldenberg-Hart, "Digital Scholarship Centers: Trends and Good Practice," report of the April 2, 2014, CNI workshop (December 2014), http://www.cni .org/wp-content/uploads/2014/11/CNI-Digitial-Schol.-Centers-report-2014.web\_.pdf.
- 3. A report from this meeting is expected in the fall of 2015. See also Joan K. Lippincott, Harriette Hemmasi, and Vivian Marie Lewis, "Trends in Digital Scholarship Centers," EDUCAUSE Review, June 16, 2014, http://www.educause.edu/ero/ article/trends-digital-scholarship-centers.
- 4. See Nancy L. Maron and Sarah Pickle, Searching for Sustainability: Strategies from Eight Digitized Special Collections (Ithaka S+R and the Association of Research Libraries, November 2013), http://www.arl.org/publications-resources/ 3022-searching-for-sustainability-strategiesfrom-eight-digitized-special-collections# .VZBFs1Ji82A.
- 5. Nancy L. Maron, Jason Yun, and Sarah Pickle, Sustaining Our Digital Future: Institutional Strategies for Digital Content (Jisc, January 2013), http://sca .jiscinvolve.org/wp/files/2013/01/Sustaining-ourdigital-future-FINAL-31.pdf. A good example of a campus inventory of DH work is the one done by Digital. Humanities@Oxford: http://digital .humanities.ox.ac.uk/people-projects.
- 6. Our Sustainability Implementation Toolkit offers step-by-step guidance for campuses interested in undertaking this examination and planning for themselves. It includes survey questions and a sample agenda for hosting roundtables with key stakeholders. See Nancy L. Maron and Sarah Pickle, "Sustainability Implementation Toolkit" (Ithaka S+R, June 18, 2014), http://www.sr.ithaka.org/researchpublications/sustainability-implementationtoolkit.
- 7. See Jennifer Schaffner and Ricky Erway, "Does Every Research Library Need a Digital Humanities Center?" (OCLC Research, 2014), http://www.oclc.org/content/dam/research/ publications/library/2014/oclcresearch-digitalhumanities-center-2014.pdf, and the response from Bethany Nowviskie: "Asking for It," February 8, 2014, http://nowviskie.org/2014/ asking-for-it/.
- 8. Maron and Pickle, Sustaining the Digital Humanities,

© 2015 Nancy L. Maron. The text of this article is licensed under the Creative Commons Attribution-ShareAlike 4.0 International License (http:// creativecommons.org/licenses/by-sa/4.0).



#### Nancy L. Maron

(nlmaronypl@gmail.com) is an independent consultant and founder of the Sustaining Digital Resources training program. Previously she was

Program Director, Sustainability and Scholarly Communication, for Ithaka S+R.