Assignment #4

A Case for Data Services

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Several years after making the transition from a community college offering two-year degrees to an institution that now offers four-year and graduate degrees, the library of this college is planning to expand into new service areas. Its efforts are to focus on developing collaborative environments, both physical and virtual, and to align with the college's new vision and funder obligations. The first step this library completed was adapting to consumer technology trends. Monasterksy depicts this movement in the article *The Library Reboot*, "Around the world, university libraries are racing to reinvent themselves to keep up with rapid transformations in twenty-first-century scholarship" (2013). For instance, the library illustrated this by renaming itself the Learning Resource Center and redesigning its physical layout. The expansion allowed for more computers and larger tables. It created an open physical space and allowed for students and faculty to gather and share information and ideas. The final step to developing a collaborative virtual environment is by establishing data-related services.

Before becoming a four-year college, having the services to offer for research was not a priority. The institution's new vision calls for establishing a strong research program and the services that accompany it. The goal is to satisfy the needs of the students and faculty along with remaining current in data and research services. Initially, the library will offer consultation and informational services. Assistance will be provided in finding data, creating data management plans, and assisting with "data description, data citation standards and data repositories" (Van Loon, 2013) along with upholding funder policies. The benefit of offering theses services encourages all-access data research and collaborative environment. After the beginning phase, the library will work alongside the institution in the development of a digital repository allowing students, faculty, and researchers to publish their data online. According to Costello, the benefit

to “publishing data online is less expensive [than publishing in print or archiving it] and it exposes the author’s work to a far wider audience” (2009).

Furthermore, the services provided by the library help support the management of the data life cycle. For instance, the tools such as the development of a data management plan and the identification of appropriate data repositories for the researcher’s data support the first phase of the management of the data life cycle, the planning and preparation phase. Next, the services such as the establishment of data citation and metadata standards support the second phase of active research and data gathering. In the final phase of post-research data storage and access, an examination of funder policies occurs and the researcher’s deposits his or her data into the pre-determined repository. The use of these services helps to maintain all stages and phases of the data life cycle (Charbonneau, 2013).

The data services provided by the library are targeted toward current students and faculty of the college. Because it is in its beginning stages after implementing these services, the target market is small. The current need is to familiarize the students and faculty with the services offered. To reach this group, the library will create a research guide to data management and the services available on its website. Additionally, the establishment of liaison roles among different departments will further engage students and faculty.

After the installation of these processes, the library will distribute a survey to evaluate and mark the progress of the services. The survey will include questions about the use of the services, where to make improvements of these services, and what new services the students and faculty would like to have. In addition to a survey, library staff will keep records to evaluate and analyze the services. For instance, records will include charting the amount of time from the request of service to its completion, deeming whether the project was successful or unsuccessful

and the use of specific tools, such as productivity software, statistical software, and online data repositories. By distributing a survey and keeping records of usage will help gauge the effectiveness of these services and allow the introduction of new services.

Once the consulting and information services are in place and the institution is ready to continue onto the second phase of creating a data repository, this produces another opportunity to engage in more stakeholders. For example, researchers from other institutions may want to use the data available in the repository. However, there needs to be an awareness of these services and resources. The college can achieve this through collaboration with other universities, colleges, and institutions.

To successfully maintain data-related services in the long-term, these services require specialized skills and a strong knowledge of data management. The library plans to create a new position, Head of Data Services, but also focus on training liaisons within the department and schools of the college. The Head of Data Services will have advanced technology skills such as metadata standards for data, knowledge of institutional repositories, data analysis software, database design, and XML and crosswalks. Furthermore, this person will have strong communication skills, collaboration skills, project management skills, and research process and data life cycle knowledge (Van Loon, 2013).

The Head of Data Services will also contribute to the training of liaisons within the departments and schools of the college. According to the article *The Last Mile: Liaison Roles in Curating Science and Engineering Research Data*, “The highly self-motivated liaisons who want to work in this realm will need to have very strong analytical, project management and problem solving skills, as well as the ability to work independently at the intersection of digital data,

technology, and metadata" (Gabridge, 2009). As presented above, the liaison should possess skills much like the Head of Data Services.

Continuous training and adaption to changing environments along with collaboration among faculty, researchers, liaisons, and other institutions are necessary elements to sustain these services long-term. Opportunities for further training exist through coursework, attending conferences, supplemental reading, and participating in industry conversations (Van Loon, 2013). However, despite a resume of advanced proficiencies of a data service librarian, others see this role not being equipped in handling data. Gabridge suggests two ways to overcome this in the article *The Last Mile: Liaison Roles in Curating Science and Engineering Research Data.* He proposes that, "First, libraries will need to build data curation systems in collaboration with other university partners; and second, libraries will need to create credible and valuable data services using the combined efforts of subject liaisons, other library staff, and drawing upon applications built on the infrastructure" (2009). By already drawing upon these resources, data-related services can be sustained over the long-term.

From this assignment, I have learned that in order to offer data-related services, a strategic plan needs to be established. Many resources and skills utilized are essential to the successful, long-term use of these services. One should consider the amount of awareness of these services in respect to the patrons along with the presented challenge of the perception of the data librarian. For future data services, I recommend marketing these services to users and creating more awareness of what they can offer and to do this by continual collaboration efforts between institutions.

When describing this course to other another classmate, I would explain how the importance of data management and data sharing are cornerstones to not only the health and e-

science industry, but also to the research realm. Collaboration efforts best accomplish successful data management and data sharing practices. Moreover, the role of the librarian is essential to the development of e-Science and e-Research fields.

References

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