Data Management Support Services by Research Libraries in North America: Are They Meeting the Challenge?

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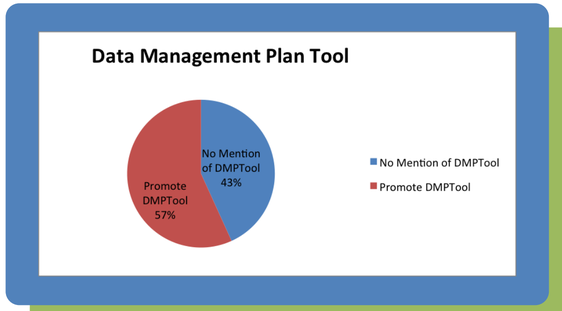
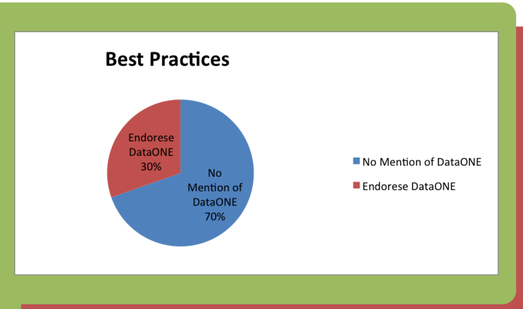
Research question

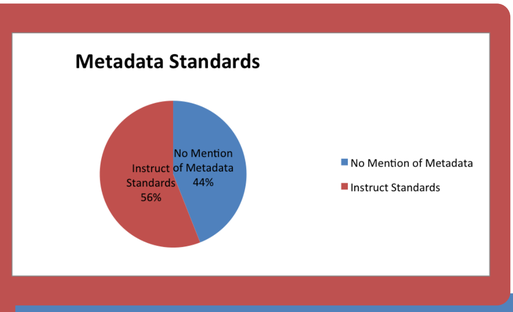
Tenopir, et al. (2011) conducted a survey exploring current data sharing practices and perceptions of barriers and enablers of data sharing by scientists.[1] One of their findings indicated that many organizations do not provide support to their researchers for data management either in the short or long term. Research libraries have traditionally taken pride as the gate keeper for knowledge produced by their institutional researchers. What have the research libraries accomplished for data management efforts that support or refute Tenopir's findings?

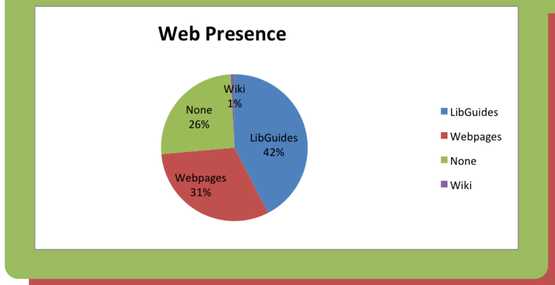
Objectives and methodology

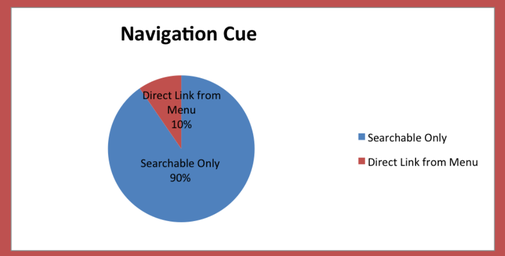
The objective of this study is to assess the types and depth of data management services that research libraries in North America provide to their institutions' researchers at the present time. Based on the stages of research lifecycles put forth by the Joint Information Systems Committee (JISC), data management information services offered by the library should include these core components: data management plan tools, best practices, metadata standards, and repository or storage options. Furthermore, how this information is communicated to the researchers is crucial; therefore, additional components should be included, such as web presence and navigational cues to present the information, librarian contacts list, as well as workshop or training opportunities. To avoid historically low response rates from questionnaire surveys, a manual evaluation of 125 Association of Research Libraries (ARL) members' websites were conducted for data collection and analysis for the above mentioned metrics. The author can find no similar research methodology addressing this state of the practice.

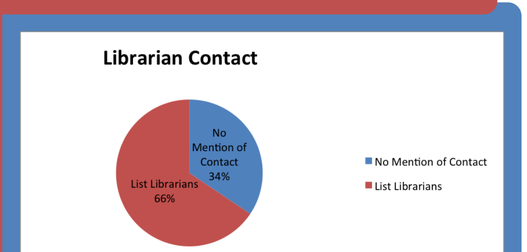


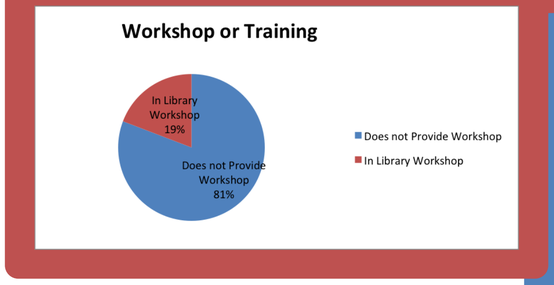


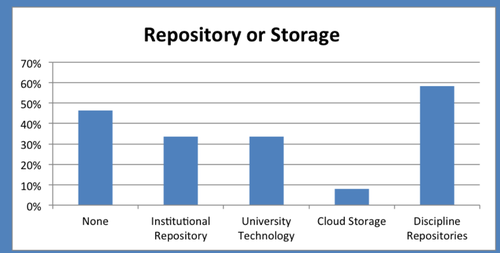


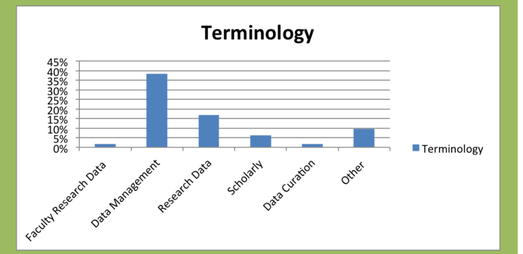












Results in Table

Data management plan tools	57% promote DMPTool
Best practices	30% endorse DataONE
Metadata standards	56% instruct on metadata importance
Repository or Storage options	58% list disciplinary open repositories, 34% advocate institutional repositories for storage needs, 34% refer to the university's storage infrastructure, and 8% specify cloud solutions
Web presence	74% provide data management presence, among them there are three options: LibGuides (42%), webpages (31%), or Wiki (1%)
Navigation cue	10% provide a direct link to data management support information from the library's website menu bar
Librarian contact	66% list one or more librarians' direct contact information
Workshop or training opportunity	19% offer workshop or training

Conclusions

One thing to note is that the terminology used by the libraries is diverse including: Data Management (the majority 39%), followed by Research Data Management (17%), Scholarly Communication/Open Access, Data Curation, Faculty Research Data, Research Data Collaboration, Lifecycle Data Management, and Digital Data Management.

In conclusion, the analysis from the library sites examined validates Tenopir's claim that libraries are not fully meeting the challenge to provide better support for researchers and their data management needs. This author believes that as information professionals, we can help narrow this gap by strategically collaborating with campus units to form a more integrated support service. And in particular, we should better communicate the structural needs for effective delivery of these services via our library's portal/Web presence.

Reference

[1]. Tenopir, Carol, et al. "Data Sharing by Scientists: Practices and Perceptions." PloS one 6.6 (2011): e21101.