Practice of Research Data Management: Findings from the IFLA LTR Project

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Abstract:

Research Data Management (RDM) has emerged as a new functional responsibility for researchers, librarians, and information professionals in the digital library environment. The concept of "data curation" as a superordinate framework for organizing RDM services emerged in the 1990s from the management of scientific information and e-science, but its usage has since spread to other disciplines, including digital humanities. A number of research studies have examined the roles of librarians and other information professionals in data curation and research data management, but have focused primarily on U.S. libraries and research institutions (Akers et al., 2014; Kim, Warga & Moen, 2013; Tenopir et al., 2015).

A variety of alternative vocabularies and competency lists for RDM have been deployed to describe the same or similar practices, reflecting the diverse environments in which data are now archived, as well as an evolving understanding of what services entail in practice. Terms such as "data curation," "digital curation," or "research data management" are often used interchangeably. Moreover, there are striking differences in both the understanding and application of basic RDM, especially "data curation," among countries and regions around the world. This presentation will share the findings a research project sponsored by the International Federation of Library Associations (IFLA), under the auspices of its Library Theory and Research (LTR) Section. The primary objective of the project was to identify the characteristic tasks and responsibilities of data curators in both international and interdisciplinary contexts. One of the main intent of the project was to identify a set of terms (a vocabulary) and possibly an ontology related to Digital Curation, by analyzing relevant textual data in the field.

The study was designed using mixed-method approach and included quantitative content analysis of 441 job announcements from 34 countries and interviews with 26 professionals. The interview participants were recruited from Australia, Canada, U.S. and six countries in Western Europe. The system used to extract relevant terms from the corpora, more generally called "key phrases" is the Keyphrase Digger (KD, see http://dh.fbk.eu/technologies/kd), developed at the Fondazione Bruno Kessler (FBK, see http://ict.fbk.eu/). KD scans a given corpus, and computes the "scores" of candidate key phrases, based on term frequency measures and linguistic syntactic information (Part of Speech patterns).

The findings of the study indicate that RDM is an evolving practice that involves not only technical systems and services structured around research data life cycle but also a range of social activities and policy initiatives. This study demonstrates a significant variation in terminology, level of policy development, models of RDM services, and technical infrastructure across institutions and countries. However, it finds common themes in social aspects of RDM, especially around efforts in raising awareness of open research data and changing research culture

The findings of this study will provide a starting point for what we hope will bring a framework for understanding different roles and competencies of RDM information professionals. Researchers, research managers, and information professionals whose work involves some element of research data management will benefit from the presentations.

References:
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