The Electronic Library Special Issue on Managing Bigger Online Data

OVERVIEW

Massive data are available on the social web, sensor networks, online databases of business, in science, and government records, leading to the so called big data problem. The global Internet added 4.1 zetabytes of data in 2014; if that amount of data were turned into audio files, it would take 8 billon years to play them all – a time longer than that of the Earth's existence. A recent report from Digital Universe shows that new and duplicated information by the year 2020 will be more than 40 zetabytes, 12 times the amount of information than that produced in 2012. Facebook has more than 1 billion registered users and produces more than 300 terabytes of log data every day; Taobao has more than 370 million members and generates more than 20 terabytes of transaction data every day; Sina Weibo has more than 300 million users and hundreds of millions of microblogs are created in one day during peak periods;and the amount of global mobile terminal data has reached 6,300 petabytes in 2015. These are but a few examples. We are living in an era of big data issues everywhere.

Big data issues are common in academics too. Researchers worldwide continue to produce large numbers of scholarly documents – including papers, books, technical reports – and the associated data, such as tutorials, proposals, lab note books, and course materials. For example, PubMed has over 20 million documents, 10 million unique names, and 70 million name mentions.

At the same time, the big data problem does not always mean the amount of data has to be at the petabyte or zetabyte level. The literature often states that the problem of big data should more accurately be called the "bigger data" problem.

All of these make "bigger data" one of the hottest research topics in the academic field.   This means that researchers in the library and information science field are in the forefront in support of big data processing, analyzing, and mining, and, therefore, able to explore the best approaches of managing knowledge discovery and organization of complex data. Therefore, it is important for the field to understand the latest development in big data related theories, technologies and practices for data analysis, visualization, personalized service, privacy protection, and complex network modeling, as well as data preservation, data sharing, reusing, and other stewardship activities. All these requirements bring great challenges for the support and management of online bigger data.

THE SCOPE

We invite submissions exploring various "bigger data" management and support-related issues. The topics specifically of interest, but not limited to, are:

1. Theory and Methodology of Bigger Data Management
   - Fundamental theory of big data management
   - Capture, collection, storage and processing of bigger data
   - Information and knowledge organization in the big data environment
   - Information extraction and mining in the big data environment
   - Academic data management in the big data environment

2. Bigger Data Management and Online repositories including various digital libraries
   - Innovation of online repositories in the big data environment
   - Sharing and reusing data in online data repositories in the big data environment
   - community repositories in the big data environment
   - Modeling users and their access to online repositories in the big data environment

3. Bigger Data Management
   - in response to emergencies
   - in smart cities
   - in decision support（including Think Tank）
   - in social computing applications

HOW TO SUBMIT

Potential authors are asked to submit to the guest editors by emailing a tentative title and short abstract (which can be revised for the actual submission) to assist in the formation of a panel of appropriate reviewers. Each actual submission of manuscript should note that it is intended for the Special Issue on Bigger Data Management. Submissions to the special issue should follow the journal's formatting guidelines (see http://emeraldgrouppublishing.com/products/journals/author_guidelines.htm?id=el), and be submitted through the journal's online submission system at http://mc.manuscriptcentral.com/tel

REVIEW PROCESS

Submissions will undergo the normal review process, and will be reviewed by three established researchers selected from a review panel formed for the special issue. Barring unforeseen problems, authors can expect to be notified regarding the review results within three months of submission.

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IMPORTANT DATES

Deadline for submission of title and abstract: **1 October 2016**
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Notification to authors: **1 February 2017**