

Digital Tsunami: Challenges in Managing Digital Information



LIBRARY SCIENCE

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ABSTRACT

Over the last few years, the technology has revolutionized the access of digital information through internet. There are billions of records of information available in the internet. The main sources are e-books, e-journals, online databases, online newspapers, Wikipedia, and number of different web sites provides digital information. This paper provides little statistical information of some of the digital information sources and problems in accessing the information

Introduction:

Generally, tsunami is a series of water waves caused by the displacement of a large volume of a body of water. In Information technology, especially the internet has profoundly changed the ways of publishing. Newspaper, magazines and periodicals have for years been published online and all kinds of texts are now available in digitized form. Publishing is changing with the increasing importance of computer technology. Publications are appearing with mixed media and increasingly in a completely electronic format. Digital media and networks have created new products and marketplaces; electronic books (e-books) are the books of the network society.

The rising cost of publications, coupled with practically frozen the budget of libraries. The technological advancements offer newer methods of information processing, retrieval and dissemination are the parameters to enforced stakeholders to look into the possible solution.

The resources are found in various formats like E-books, E-journals, online databases, CD-ROMs, Reference sources etc. We found that the uses of e-journals are very popular in academic institutions. The other web resources like online databases are also using in various libraries, but the printed books are not replacing with e-books as compared with e-journals. There are several reasons like technological limitations, tendency of user etc. An attempt has been made here to highlights some issues of e-books and its uses in academic environment.

Too much information



Today's enterprise produces more information than ever before. This information is stored in reports, e-mails, slide shows, and spreadsheets or published on the company websites

"We are drowning in information, but are starved of knowledge". John Naisbitt, Megatrends (1982)

Major Sources of Digital Information:

E Books:

E book is an electronic version of printed book. Approximately, over 2 million free e-books were available in different subject areas. The production of e-books does not consume paper, ink or book binding materials, obsoleting the environmental footprint and cost associated with physical publication of books.

An e-book can be purchased / borrowed, downloaded, and used immediately, whereas when one buys or borrows a book, one must go to a bookshop, a home library, or public library during limited hours, or wait for a delivery.

Printed books use 3 times more raw materials and 78 times more water to produce. Depending on possible digital rights management, e-books can be backed up to recover them in the case of loss or damage and it may be possible to recover a new copy without cost from the distributor. Compared to printed publishing, it is cheaper and easier for authors to self-publish e-books. Also, the dispersal of a free e-book copy can stimulate the sales of the printed version

The Association of American Publishers report that E-book sales increased from \$32.4 million in January 2010 to \$69.9 million in January 2011 conversely, for the same period, sales of adult and mass market paperbacks dropped from \$56.4 million to \$39 million. E-book publishers work with aspiring authors and can help you prepare your book for electronic publication.

E Journals:

Electronic journals, also known as e-journals, are scholarly journals or intellectual magazines that can be accessed via electronic transmission. In practice, this means that they are usually published on the Web. They are a specialized form of electronic document: they have the purpose of providing material for academic research and study, and they are formatted approximately like journal articles in traditional printed journals. Many electronic journals are listed in directories such as the Directory of Open Access Journals, and the articles indexed in bibliographic databases and search engines for the academic discipline concerned.

Some electronic journals are online-only journals; some are online versions of printed journals, sometimes with extra video and interactive media material. Most commercial journals are subscription-based, and/or allow pay-per-view access. Many universities subscribe in bulk to packages of electronic journals, so as to provide access to them to their students and faculty. It is generally also possible for individuals to purchase an annual subscription to a journal from the original publisher.

An increasing number of e-journals are available as open access journals, requiring no subscription and offering free full-text articles and reviews to all. Individual articles from electronic journals may be found online for free in an ad-hoc manner: in working paper archives; on personal homepages; and in the collections held in institutional repositories and subject repositories. Some commercial journals find ways to offer free materials. They may offer their initial issue or issues free, and then charge thereafter. Some give away their book reviews section for free. Others offer the first few pages of each article for free.

Databases:

A database is a collection of information that is organized so that it can easily be accessed, managed, and updated. In one view, databases can be classified according to types of content: bibliographic, full-text, numeric, and images. There are number of databases are available. (www.lib.umich.edu/database-listing). Some of the major e-journal databases are Science Direct, EBSCO, Kluwer online, Springer LINK, Wiley Interscience, IEEE Xplore, Institute of Physics, MCB Emerald Library, Cambridge Journals Online, Academic IDEAL, OCLC's First Search Service, UMI's Proquest, JSTOR, Project Muse, Journals@ OVID, Gale, etc.

Following table shows that the number of articles published by few online information service providers;

SOURCE	ARTICLES PUBLISHED	
IEL ONLINE	36,33,040	Journals,Magazines-102356 Conf.Proc.-25,60,269 Ebooks27,001 Standards-6091
DOAJ	15,09,225	Journals-5567
ACM Digital Library	4,07,367	Ebooks-1505 Proc. Volumes-2000
EBSCO	3,60,000	
EMERALD		Journals-300 Books-23,500
Open J-Gate	300000	Journals-300+
Scifinder(CAS)	8000	
MathSci	3,00000	
Sage		Journals-750 Ebooks-6000
SCOPUS	55million record	Titles-21915
Web of Science		Journals-12000 Conf.Proc-160000
Onlinenewspapers.com	1000's of newspaper articles from all over the world	

Problems in accessing excess information

The technology (ICT) has enabled instant access to enormous information anywhere anytime. One serious consequence of this "access to excess" problem is the reversal of the traditional sequence of selection and then accessing information in the new digital world. That is traditionally libraries were first selecting the material and then allowing their users to access them. Now the users have to access and retrieve a large chunk of material and then start sifting the mass for selecting the required information from thousands and at times, millions of hits

Digital Information management is, however, much more than just technology. Equally importantly, it is about the business processes and practices that underpin the creation and use of information. It is also about the information itself, including the structure of information ('information architecture'), metadata, content quality, and more.

Information management therefore encompasses:

- people
- process
- technology
- content

Digital Information management challenges:

Organisations are confronted with many information management problems and issues. In many ways, the growth of electronic information (rather than paper) has only worsened these issues over the last decade or two. Common information management problems include:

- Large number of disparate information management systems.
- Little integration or coordination between information systems.
- Range of legacy systems requiring upgrading or replacement.
- Direct competition between information management systems.
- No clear strategic direction for the overall technology environment.
- Limited and patchy adoption of existing information systems by staff.
- Poor quality of information, including lack of consistency, duplication, and out-of-date Information
- Little recognition and support of information management by senior management.
- Limited resources for deploying, managing or improving information systems.
- Lack of enterprise-wide definitions for information types and values
- Large number of diverse business needs and issues to be addressed.
- Lack of clarity around broader organisational strategies and directions.
- Difficulties in changing working practices and processes of staff.
- Internal politics impacting on the ability to coordinate activities enterprise-wide.

Digital Information Management benefits

- Improved business processes through faster access to and retrieval of information.
- Better-informed decision-making through quicker access to all of the right information.
- Better service delivery because relevant information can be located easily.
- Less staff time spent looking for information. There are fewer information silos.
- More information sharing across the agency and between agencies, and potential for re-use of information by government and the Australian community.
- Lower compliance costs and enhanced ability to provide accurate, timely and transparent responses to legislative and regulatory requirements.
- Cost savings from less creation, storage, retrieval and handling of paper records.

Conclusion:

The Internet is being used as efficient tool for accessing, storing and dissemination of information worldwide. Millions of Information Records are available in the Digital format in different sources like, e-Books, e-journals, Encyclopedia, Dictionaries, Online news papers, ETDs through internet services and CD ROM. Providing information services in the digital libraries depends on various factors such as users needs and aim of the institution. Accessing digital information may be challenge because, acquisition process like cost issues, licensing policies, language, ICT etc.

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