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Internet for Research

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Abstract— The Internet is a tremendous source of gaining information of all kinds. It has made research easier and convenient than ever before. It is capable of offering something to almost everyone. Internet-based research is a relatively new and evolving field. It is an interdisciplinary field. It has its own benefits and limitations. This paper presents a brief introduction on how to conduct effective research on the Internet.

Keywords— Internet research, online research, Internet-based research

I. INTRODUCTION

The Internet is a fast-growing medium for information exchange. It has been praised for its role in democratizing knowledge. Internet access has been declared as a basic human right by the United Nations in 2011. Internet has emerged as a global infrastructure for conducting research and sharing research findings. It enables one to have access to a wide range of information from virtually any geographical location in the world. It offers a wealth of information, online journals and magazines which the budget of a typical institution may not cover.

Internet research (or Internet-based research) involves using the Internet to obtain information to conduct research. It may take the form of a personal research on a specific topic, a professor or student conducting research on a project or paper, or a journalist researching stories [1]. It may also take the form of mounting a research survey via the Internet to save the cost of printing and postage.

II. BENEFITS AND LIMITATIONS

Internet research has its advantages and disadvantages [2, 3]. It provides ease of access to information. It is fast and immediate. Hundreds of pages on the topic can be found within seconds. Sensitive topics can be researched effectively. The availability of indexing on many websites will save researchers a lot of time.

One obvious disadvantage is that not everyone has access to the Internet. Another disadvantage is managing the overwhelming results and verifying the writer's credentials. This is known as information overload [4]. Being a public domain, the information on the web may not go through the process of "peer review" and it is unregulated. Electronic information lacks portability. Internet as a rapidly changing medium poses a challenge for researchers. Establishing the authenticity of information may be difficult. A great risk associated with Internet research is the potential for breaches in subject confidentiality.

III. SEARCH TOOLS

Research information may be collected online using email, news group, and World Wide Web. Special search tools enable one to dig out information using search engines. Search engines are software tools that use an automated search index to generate web pages.

They are information retrieval systems used in processing a search query. Each search engine searches a different database of websites. The most popular search engine is Google (www.google.com). Search engines such as Google, Bing, Hotbot, Yahoo and others differ considerably in how they operate. US government search engine (www.firstgov.gov) can be useful. These search engines can provide assistance to an Internet researcher.

Internet resources available online include commercial databases, government databases, educational association sources, and specialty webpages [5]. Online databases include FirstSearch, ERIC, and JSTOR. The US government library of Congress (www.loc.gov) provides one of the largest collection of information sources. Reference librarians can help in providing other sources.

Once we obtain information from the search engines or online databases, we must evaluate its usefulness. Guidelines for evaluating information from the Internet include [6,7]:
- *Authority*: Check the authority and the credentials of the author. See if the publisher is reputable.
- *Affiliation*: Check the sponsor of the website and see if the author is affiliated with a reputable institution or organization.
- *Audience level*: Check if it is for elementary, college, or research level. Typically information is directed to some experts, not to the general public.
- *Currency*: Check if the information is current or up-to-date. The best websites will tell you when they were updated.

- *Reliability/Accuracy*: Check if the information is factual (not just opinion), accurate, and reliable.

Not following these guidelines may do more damage than good.

IV. PUBLICATION

Scholarly publishing connects authors with readers. Publication of research findings may be required as a scholarly activity. Electronic journals are providing alternative publishing opportunities to traditional journals. To publish the information obtained from the Internet (or any source for that matter), you should properly cite the sources. Stating someone's words as your own is illegal. Credible research requires that you back your points or claims with credible sources.

It is important to maintain good ethical practices when conducting research or writing a paper. Keep in mind that all materials on the Internet are protected by the copyright laws.

Misconduct in publishing may involve redundant (or duplicate) publication, plagiarism, data fabrication, and authorship conflicts [8].

V. CONCLUSION

The Internet will continue to be an indispensable tool for conducting research. Today, Internet researchers can write, share, and interact with others effortlessly in real time and from anywhere. Although the Internet is a tremendous source of information, one must be careful, critical, and judicious in using it because "anything goes" on the Internet. The uncontrolled nature of the medium prevents it from providing all the information researchers need. Internet seems to be a mixed blessing for researchers. It can make research easier and convenient, but it will not happen automatically [9]. *Internet Research* is a journal devoted to conducting research on the Internet.

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