

عنوان المحاضرة: الاستشهادات المرجعية في
البيئة الالكترونية

المادة الدراسية: قياسات المعلومات

المرحلة الدراسية: الثاني

مدرس المادة: أ.م.د. وسن سامي

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جامعة الموصل

كلية الآداب

القسم: المعلومات وتقنيات المعرفة

Citations in the Electronic Environment

A citation in the traditional environment is a reference to a source that an author consulted during their research or study and benefited from in one way or another. It represents the indirect communication of authors through their intellectual output. There are specific places where citations are mentioned, and the methodology of information measurement is based, in part, on analyzing citations to derive relationships and indicators that help in mapping the knowledge of a particular field. The question that arises now is

Are citations found only in printed sources or information repositories, or do they also exist in the electronic environment

The answer is that whatever is published electronically is intellectual output in any subject area, relying on successive efforts. Therefore, the author must depend on sources, and thus, these sources must be cited. Reference citations are essential in the electronic environment, and they do not differ from citations in the traditional environment in terms of the logic behind the citation itself. Citation is an ethical principle aimed at ensuring scientific integrity and intellectual property rights by attributing ideas and information to their originators. The electronic environment is that environment which relies on the use of technologies and developments in communication networks and employs them in the processes of exchanging information among members of society. This environment was characterized by its hybrid communication methods, combining written, audio, and visual media. It brought together various forms and types of information simultaneously, rapidly transforming the landscape of knowledge and information communication. Authors and researchers now have new ways to research, publish, and disseminate their intellectual output, including computers, communication environments, open-access journals, and

electronic journals. Electronic publishing represents a revolution in the field of publishing, encompassing data processing and preparation, information dissemination technologies using words, images, graphics, animation, and all forms of expression, as well as telecommunications systems and networks.

With the development of online technological systems and software, the first online electronic journal appeared in the 1970s. This led to continued development, especially with the emergence of desktop publishing software, word processing, and specialized spreadsheets. Personal computers also evolved, and finally, laser technology was used to produce storage media, namely laser discs, which had a powerful impact on electronic publishing. This was followed by multimedia technology and hypertext. There are general principles that must be followed when creating any hypertext: 1- Providing non-sequential retrieval of a large body of information. 2- Using cross-references (also called links or connections) to link pieces of information. 3- Rapidly delivering related pieces of information to the user. 4- Computer-aided construction: The role of the hypertext creator is to construct the text received digitally from the author. This makes the text consist of a set of elements or components, the most important of which are: 1/ Units or blocks: Here, the text produced by the author, including words, images, graphics, and tables, is divided into units of information. In the case of an electronic document, these are called blocks or nodes, and the size or content of a block varies. According to the original text sent by the author to the creator. 2/ Links: These are fundamental to building electronic texts. They connect blocks or units of information within the text or connect blocks and units of information outside the text. 3/ Using buttons: This is the way links are represented or displayed on the screen. It can be highlighted text, a button, an icon, or any other graphics. The source of the link is referred to as the "link source," while the destination is called the "link destination." The link is only activated after selecting its corresponding buttons.

:Tools Used

These are either editing tools that help the creator create blocks and links and connect them, or navigation tools that help the user of the text to browse efficiently and easily through all parts of the text. One of the most important advantages of online publishing is the reliance on hypertext, which in turn enables hyperlinking, whether internal between parts of a single text or external between parts of different texts available on multiple websites. Types of Hyperlinks

External Links: Sometimes used to refer to a link that exits the website /1 (pointing out), and other times used to refer to a link that points directly to other websites (pointing inside the website). Of course, the meaning of these two terms is completely different. We could have followed most studies that agreed on the definition of external links, which they extended to include the term "Outgoing" or "Out Links," agreeing that they are the mirrors that point from the original site to other sites outside of it

External Links: These are the opposite of external links and are called /2 "Coming in," "In," or "Backlist." They refer to the parent links from other sites to the original site. The abundance of these links indicates the extent of the site's reach and coverage in the online environment

Internal Links: This is the third type, and there is no disagreement about it. /3 These links are those whose ends are within the original site, hence they are called internal links. In this case, the link is between pages within the same site or sometimes between elements within the same page. They facilitate quick navigation between site pages or easy movement up and down within a single page. They are also called navigational links because their purpose is to facilitate navigation within the site's pages

Data Collection Tools

Each methodology has its own suitable data collection tools. If citations rely on direct counting and statistical equations... And in sports, super-links also depend on the same methods except for some differences that suit the different nature of the environment between them. Direct counting is

considered the first method of collecting hyperlinks in preparation for analysis.

The analyst enumerates the pages of the website to be analyzed and counts the links within it. Direct manual counting is the most accurate method for collecting data from the website to be analyzed, but it is also the most difficult and unsuitable for analyzing a large number of websites. It is more appropriate for a single website or a small number of small websites. Web exploitation techniques have certainly not ceased to develop alternative methods suitable for counting and enumerating a large number of websites. These techniques have emerged in the development of commercial search engines and web crawlers to perform this data collection function. Commercial search engines such as Google, Yahoo, AltaVista, and others are tools that can be used to collect data from websites whose links are to be analyzed. However, the most significant problems with using commercial search engines for this purpose are: - Low confidence in the results of these commercial search engines due to their limited coverage of websites and their incomplete enumeration of exposed and unexposed web pages. The latest results confirming this came in 2003, which proved that the best search engine It can cover between 22% and 25% of what is expected or present in the internet, compiling data from an infinite number of websites and pages. However, the most significant problems with commercial search engines used for this purpose are: - Weak confidence in the results of these commercial engines, due to their limited coverage of websites and incomplete enumeration of both exposed and unexposed web pages. The latest results confirming this came in 2003, proving that the best search engine can cover between 22% and 25% of what is expected or present in the internet. Despite the advantage of using Boolean search, commercial search engines are always characterized by the generality of their retrieved results. Web Impact Factor (WTF): Also called Influence, Impact, Impact Factor, or Importance, it measures the tendency of one author to be cited by another, or the tendency of one document or journal to be cited by another. A cited item is said to have an influence on the material that cites it. Receptivity is said to be the acceptance of the cited item. The idea behind the Web Impact Factor is the same as that of the Journal Impact Factor, which relies on measuring the citations of journal articles over a specific period. It measures the importance or weight of a journal among a group of journals based on the number of citations it received during a specific period. Similarly, for web pages and

websites, it measures the importance or weight of a journal among a group of journals based on citations. Likewise, for website pages, it measures the importance or weight of a website based on the number of superlinks to the site. Therefore, WTF is a quantitative indicator used as an evaluation tool. Website ranking and its significance measure the value these websites hold. This is based on calculating the average frequency of hyperlinks to the website being analyzed. Although this indicator was initially tested on academic and research websites, it was later applied to all types and categories of websites, including commercial and non-commercial, personal, corporate news, and private sites, etc. Therefore, it is a form of quantitative measurement used to .determine the relative value of a website among a group of websites