



**Digital Documentary Research in the Field of Humanities:
A Study of Tools and Presentation of Sources**

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Received: 23/04/2025

Accepted: 23/06//2025

Published: 30/06/2025

DOI: 10.53284/2120-012-002-006

Abstract:

The digital documentary research based on appropriate plans and strategies that enable the researcher to play in the digital environment through the tools and methods of searching for modern and documented information sources, and even in the speed of obtaining them, helped by these tools, search engines, open archives, specialized portals and other tools to identify and retrieve all the information he needs in a practical methodology and technique to draw the contours of his research work, and he cannot do so by having the information culture to know the various sources available and have the required competence to accomplish the research and meet conditions such as knowing the strategy of searching for places of existence.

Keywords: Digital documentary research, information sources, digital research tools, research methods, artificial intelligence.

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Introduction

Modern technologies and the Internet have played a prominent role in the development of documentary research in the digital environment, and the emergence of digital research tools has had a significant impact in facilitating access to digital information sources, by controlling the processes, procedures and techniques of documentary research, which helped researchers, especially university students, to know the rules that govern the research process, through which he can independently and quickly obtain all the documents he needs, and these tools also improved the ability of the researcher to translate the accountability of research topics into a technical method characterized by accuracy.

Documentary research began with the proper use of automated catalogs of all kinds found in university libraries, then searching for the document on the World Wide Web to know the rules that enable him to carry out documentary research in an independent manner, and to access the required information in a short time.

In the context of digital documentary research, we cannot overlook two things, the first of which is the role of learning the steps of digital documentary research, as a systematic way to know the sources of information, which is a set of systematic steps that the researcher follows in order to access the information he lacks, or answer the questions he has, using all available sources, whatever their form and the means and methods that allow him to gain more access to information, sort it and then use and invest it to prove information and prove it with hard evidence, verify or deny an idea or even discover new knowledge (Morizio , 2020, p. 69) The needs of researchers and students for information and their ability to evaluate it in light of modern technology, multimedia and its techniques require them to provide information skills in their university education, to meet these increasing and continuous needs for information, as it is their primary resource, within the system in which they are active. The second is digital documentary research tools, as the developments brought about by modern technologies in the field of information led to the emergence of new tools that became necessary for the researcher to deal with in order to adapt and adapt to the digital age, and some have thought about the need to prepare programs to develop and teach it in Arab universities. (Al-Hamshari, 2000, pp. 40-41) , we add to this that the optimal use of libraries, especially digital ones, remains linked to learning skills through information culture and realizing the importance of digital documentary research techniques, for everyone who uses digital information sources available either in documentary information systems or in the digital space, and here lies the basic function performed by university libraries in raising awareness of these competencies and how they can be learned through self-learning through digital platforms, and from this we can see



the importance of digital documentary research in the current era, which is called the age of digital information.

1. Study questions: Based on the above, the questions of our study are as follows:

- What is digital documentary research in the digital environment? What are the steps and methods of searching for information and how is the process of documentary retrieval using the resources available in the digital environment through the Internet library?
- Are there any difficulties faced by the researcher or university student in digital documentary research processes using web search tools?

2. Importance and objectives of the study

1.2. The importance of our study is due to the importance of the topic itself, as it deals with the most important channel of scientific communication, as it will clarify the importance of digital documentary research, explain the methodological steps adopted to conduct a successful digital research, review the digital research tools in university libraries, in addition to clarifying the difficulties facing the researcher or student in using digital documentary research tools.

2.2. Objectives of the study: Every study or scientific research has an objective of scientific value, and it tends to achieve general objectives, and among the objectives that this study seeks to achieve are:

- Clarifying the concept of digital documentary research and a theoretical study of the concept.
- Highlighting the importance of digital documentary research in the current era and the need to train in its skills and techniques.
- Know the main tools used in digital documentary research.

3. Approach to the study:

The study was based on the documentary method, which relies on collecting scientific material through various sources, reading it, then analyzing it and drawing conclusions (Kandelji, 2018, p. 58) it is also considered one of the most important methods used in theoretical studies.

4. Terminology of the study:

1.4. The concept of research: Researchers and those interested in the field of scientific research have provided several definitions of the meaning of "research", there are those who argued that it is "an attempt to discover, excavate, develop, examine and investigate knowledge through careful investigation and deep criticism and then present it in an integrated and intelligent manner in order to walk in the ranks of global civilization, and contribute to it a full living human contribution." Another definition is "the systematic examination and



investigation to discover, excavate, examine and investigate knowledge and then present it in an intelligent manner (Shami and Hasaballah, page 2259) .

2.4. The concept of documentary research: It is the process of searching for information sources and this process goes through several stages, it is necessary to use research tools, namely automated catalogs from document management and management systems such as Cengage and DSPC at the level of university libraries, as well as bibliographic databases, university theses, and search engines on the World Wide Web. Documentary research is a type of research that relies on the collection and study of documents related to the content of the research and is also defined as a meticulous research based on reliable sources that contribute to the understanding of a specific issue or phenomenon by relying on the information recorded about it, which helps to reach the appropriate results related to the subject of documentary research.

3.4. Documentary research methodology: It is the research that relies on the documentary method based on the collection and scrutiny of documents to try to understand a specific phenomenon or issue in the light of the available recorded and documented information about it, and then analyzing it so that the researcher can draw conclusions related to the research issue. Documentary research is considered a very sensitive stage that should be taken care of by those in the field of education and research, starting with the emergence of research spaces and tools.

The concept of a digital document: (Claerr & Westeel, 2015, pp. 27-28)

Document as a medium: this view is based on the idea that a document is a physical object and we study its structure. The document consists of a manageable support that contains readable recordings that represent the content of the document.

. If: Document = Holder + Registration.

The concept of a digital document: There are several definitions of a digital document: It is a document that is created, processed and transmitted through a computer system and requires an intermediary to read and use it *logique de médiation* The process of digital documentation involves converting physical documents into digital formats, making them available on computers This process, known as document digitization, simplifies storage and retrieval (Fahmy Talba, 2018, p. 77) .

4.4. Searching for information and documents: The search for information is access to information through the intermediary between the information and the researcher may be or the automated catalog of the library available to the researcher and is called direct search and the search for information can be linguistic or idiomatic or an event of events or statistical,



biographical, geographical or thematic and direct information is searched for from reference books, which are also considered one of the tools for searching for information (Al-Hosh, 2013, page 89) such as linguistic and idiomatic dictionaries or geographical, biographical, biographical, thematic through encyclopedias.

5. Document search tools (indirect): These tools are used to search through bibliographies or through the automated catalogs of university libraries, or the unified catalogs of libraries (a group of libraries that are almost intertwined online so that the beneficiary can remotely access the catalogs of Algerian university libraries that are not unified, whether in the west, center, south or abroad foreign libraries to know the content of the library balances through their unified catalogs to obtain the bibliographic data that we are looking for

1.5. Searching through automated tools in the library: There is a search module (Finde) balance **on** the automated catalog, the library management system Cengage Mono poste version We can mention the documentary research tools in an Algerian university library (the library of the Faculty of Social Sciences at the University of Mostaganem), and let's take as an example by way of example and not limited to my teaching experience at the university, which lasts more than fifteen years for humanities students and in these documentary research standards is three years. Here we are talking about the library management system (Ghadarni, 2015, page 55) , and searching it, we find that search tools such as automated catalogs can be done on the search module on the online catalog: This module allows readers to conduct a search in the library catalog, and when clicking on the documentary search module, a window appears The search process consists of entering one or more words by pressing the search button, which may be specific to the author, title, subject, or keywords, as well as the possible date of publication of the document. The search takes several ways to reach the desired document.

4.4.2 The concept of digital documentary research: refers to the use of electronic methods and systems to create, manage, store, and share information (Al-Sharia, 2020, p. 56) . It can include a variety of formats such as text documents, spreadsheets, images, videos, and other digital media, the term can also refer to the process of converting physical or analog documents into digital formats (Claerr & Westeel, 2015, pp. 18-20)

Such as scanning or digitizing paper records. Digital documentation has become increasingly prevalent with the advent of computer technology and the Internet, as it allows for ease of organization, accessibility, and collaboration.

. 2.5. Sources of information : It is all known traditional paper and non-paper information sources stored electronically on magnetic or laser media of all kinds, or those non-paper



sources that are also stored electronically as they are produced by their sources, (authors, publishers) in database files and information banks available to users by direct connection or internally in the library or information center through other advanced CD-ROM systems (Al-Samarrai, 1993, page 23)

3.5. Digital information sources: Information sources that are published electronically on the virtual digital information network allow the provision of information, services and materials to the community of beneficiaries, it is possible to browse and read various magazines and e-books in various languages, and the advantages of virtualization are that it allows the availability of information, its freshness and accuracy in obtaining it, and the immediacy of obtaining articles and books in electronic form before they appear in print, and it is economical in the places of conservation and storage of sources. (Alian and Al-Samarrai, 2016, p. 235) .

The development that occurred in the field of information or what is known as the information revolution in the third millennium of this century, which helps in conducting communications between individuals and groups and contributes to the abundance of information sources, so the investment of the Internet and the use of its resources as an information source are important matters that must be followed up, whether at the level of its digital resources or its services, and among the resources of the information network that are considered as an information source, so the investment of the Internet as an information source includes the following:

6. Objectives of documentary research: There are many objectives of documentary research, but the researcher must be aware of the strategies he or she carefully follows to achieve results:

Helping the researcher gain a methodology to help them get started on any scientific research project

Helping the researcher learn the concepts of document organization.

Training on the use of a methodology for obtaining, selecting and evaluating documents, and developing the research capabilities and skills of the researcher or student.

7. Digital information sources:

1.7. Types of sources or documents used in digital research:

Electronic documents are traditional documents that have been digitized using scanners or computers in all types of documents, images, maps, videos, and various media. Websites and web pages. There are also contact lists, open source archives (Montréal, 2023) Electronic information resources on CD-ROM: This type of source fills the gaps of the previous type, as many organizations have tended to use these databases as a substitute for online search or On-



(Abdullah, 2021, p. 117) , in addition to publications or full-text reference sources such as encyclopedias, encyclopedias, attackers, and guides. -Non-bibliographic electronic information sources: Bases de données non bibliographiques (Bases de données non bibliographiques) are divided into: Full Text electronic resources.

- Bases de données numériques.
- Bases de données numériques textuelles
- On-Line electronic information sources: These are local, regional and international databases that allow libraries, information centers, scientific, cultural, commercial and media organizations to access information sources electronically through communication networks (Al-Shariaa, 2020) . These sources provide the researcher with the possibility of accessing information sources that are located in distant places and distributed in more than one location.

2.7. Virtual Internet resources and research tools: (Mesguich & Thomas, 2012, p. 35)

Among the resources of the information network that are considered as an information source, we mention the following: Information sources that are published electronically on the Internet allow the provision of services, information and materials to the community of beneficiaries, it is possible to browse and read various magazines and digital or computerized books in various languages, and the advantages of the global information network are that it allows the availability of information, its novelty, accuracy and speed in obtaining it, and even the immediacy in obtaining articles and books in electronic form before they appear in print, and it also economizes in the places of conservation and storage of sources, including databases such as: (Alian and Samarraï, 2016, page 235)

- Dialogue librairie is a database that commercializes traditional and electronic information sources and contains digital and traditional information sources in all disciplines.
- Electronic periodicals available online include a variety of periodicals available online and can be divided as follows: ¹Periodicals that are published in electronic form only and do not have paper originals or traditional form. Periodicals published in both paper and electronic formats. Periodicals that are available online through databases and networks. There are also many websites available on the Internet that deal with international periodicals and newspapers in various languages that allow users to access them for free and familiarize themselves with their contents.
- Online research databases such as Dialog: The first organization to offer Online Information Search and Retrieval services, Dialog is now one of the largest online information services organizations for bibliographic records contained in databases in multiple fields,



including marketing, science and technology, providing services in technical and technical information and online information in multiple fields.

➤ **EBSCO Databases:** It is a multidisciplinary database site that works to deliver and make journal articles and research available through databases and there are many titles of periodicals that offer their services to researchers, a large part of which are full-text and abstracted. (Bibliographic databases and text databases have many registrations in their databases of full-text articles (Belabbas, 2017) .

➤ **Email as an information source:** Email provides services and applications and is one of the most important and widespread services on the Internet, where individuals can communicate, communicate and exchange messages, documents and files for professional, research, professional and personal purposes, and the applications of email as an information source can be summarized as a means of communication between researchers to exchange information and scientific and research opinions, send documents to be attached to messages as an attachment, supervise university theses, prepare and write research papers and publish them electronically, prepare to hold scientific courses and conferences, and exchange working papers.

➤ **Discussion groups:** It is an electronic service that should be included in the interests of contemporary libraries and information centers, as it includes more than ten thousand discussion groups with different topics and interests that discuss and ask and answer political, scientific, social and professional topics, and placed in a dedicated place for the group on the network so that all individuals who subscribe to the group can enter, read and comment.

8. Digital document search tools in the web:

They are systems within websites that help collect, build, index, search, and retrieve information, and provide the user with the location of the information as they act as an intermediary between the user and the publisher of the information

Research tools that enable the user to utilize Internet services such as searching, retrieving, investigating and finding information or documents on the Internet related to databases and websites (Béatrice, 2005, pp. 36-37) Advanced search options should be used in search engines (Advanced Search).

1.8. Research methods and tools in the digital environment.

It indexes and categorizes information in a hierarchical structure that starts with the general primary key to the information and then progresses to more specialized topics. This categorization process is carried out by human staff who track and index information publishing sites according to their topics and places of publication, and record summaries of their contents. Search engines depend on the type and security of the programs used, whose performance is



similar in all types of engines, and the division here will not be to highlight these types, but rather to indicate the aspects that can address the types of search engines through them

Search engines: Search engines are free programs available through special websites on the Internet that allow the user to search for specific information, people or files within various Internet sources. These engines rely on automatic indexing by monitoring the expressions, vocabulary and keywords contained in the information published in the Internet sources. They are searched using keywords (Al-Hosh, 2013, p. 96).

Search engines are characterized by the fact that they contain more information than search directories with the freshness of the information A search engine consists of three main parts:

1. Explorer Program
2. Indexer
3. Finder program

Types of search engines: Search engines that specialize in topics in terms of geographic scope of the topic, language, retrieval, etc: Métamoteur specialized search engines and reference site portals such as topical directories and thematic directories: The second type of research tools in the digital environment are the most important general directories such as multidisciplinary scientific directories and digital libraries:

The Annuaire collectif de ressources scientifiques identifies the reference sites and links specified by university libraries as well as a directory of periodicals: Annuaire de revues en libre accès. Among the most widely used search engines on the Internet are the following: Google.com and Google.ae by university students, especially the Google.com search engine because it is easy to search and retrieve .

Search options: First of all, it is important to evaluate the contents of the documents on the website, and to know the basic types of websites according to their goals. There are many types of tools, the most important of which are used by researchers, especially a tool that searches for information sources on the Internet on sites and stores their addresses on its data observatory, which is then made available to users according to the term or terms used by the researcher or student, in their research and thus enables the beneficiary to access various information sources on the Internet, and these sources are collected (Spidering or Crawling)) Either in an automated way and in a human way by a human (Dubois, 2004, p. 70) .

2.8. Ways to search the web through tools:

Search processes and techniques: The idea of search relies on the existence of huge databases within search systems, as when a new website is created, the owners of this website register it in the database of one or more of these systems. The registration process is done either through



a form in which the name of the site and its contents are recorded, or through the use of special programs run by search systems called Spiders (Programs)

Search options: First of all, it is important to evaluate the contents of the documents on the website, and to know the basic types of websites according to their objectives. There are many types of tools, the most important of which are mainly used by researchers. It is a tool that searches for information sources on the Internet on sites and stores their addresses on its data observatory, which is then made available to users according to the term or terms used by the researcher or student, in their research and thus enables the beneficiary to access various information sources on the Internet, and these sources are collected ((Dubois, 2004, p. 73)). Spidering or Crawling) either automatically and in a human way by a human

Digital research tools:

These are the procedures that enable us to find sources in order to obtain documents from websites through the documentary diversity available and the researcher and student must be able to find the right information requires good control of the available search tools (Larbi, 2025) . Search engines in their search for websites use keywords and search mechanisms in which some operators are used to provide additional options for the search process and there are two ways to search and for a good digital search to come in a good form, it must have the following:

1. The researcher or student must have a digital literacy and information about documents in digitally available sources.
2. Knowledge of digital research tools and methods of use and retrieval.
2. Be aware of what is published and produced and understand the digital information environment
3. Knowledge and use of research tools at an advanced level.
4. Recognize several types of documents, regardless of their nature, form, and bearer, and identify effective and reliable digital documents.

In search engines, there are two types of **search**: Simple Search: such as what is found in libraries through automated catalogs with their various systems such as Cengage, Dspace, and other systems and programs.

The search is done by typing a word without any tags or signs. Advanced Search: **The** advanced search features offered by many search engines increase the possibility of finding



information, and it is an effective way to search for specific information by allowing users to search for multiple keywords together. Searching with a search engine: When using a search engine, the plan or stages are as shown in the following figure: (Mohammed Abdullah, 2004, page 331) .

Figure 1 represents the search mechanisms of search engines:

The sign	Its function	Example
(+)	Search for all topics that contain two or more words together	computer+internet
(-)	Search for all sites containing a word and exclude the other word	computer-internet
(" ")	Find all locations that contain the entire tag in the same order	"computer skills"
(OR)	Search for all sites that contain one or all of the words	computer or internet
site:	Search for topics within a specific site only	<u>site:condaianllkhir.com</u>

Search engines are automated programs designed to work in the online environment. Database management systems developed to manage their content and specifically developed to work on the Internet." It is a way to search for documents. Some of the most important search engines include but are not limited to the following: Google is one of the most powerful search engines capable of searching billions of web pages, and it is also one of the engines used for simple search purposes.

How to use the search engine "Google: Google.com" / Google Scholar /. Specialized Google ae prefers to use a set of famous classifications to give the researcher the required results, and this engine google.com in particular is one of the best indexes and the easiest to use by the researcher and the student of this engine.

Before the researcher embarks on the research process, it is necessary for him to have a set of questions that dominate his mind, some of which are the real key to accessing the information to be retrieved and judging the extent to which it is relevant to the researcher's research and knowledge needs.



Here, a specific strategy must be in place to make it easier for the researcher to conduct the search. The researcher can also know these methods, by identifying your topic and describing it, then finding keywords and different classifications, starting with known sites or those sites that you have already reviewed, he can use specialized portals in the subject of specialization that may contain lists or topic directories, or use the Search Engine, and note if it contains a topic directory.

-Spider Program: It is used to find and view new pages on the web, and it takes the indicators of sites from the title page and the keywords they contain, in addition to the contents of the Meta Tags, and tracks the links in them to visit other pages, and the purpose of this is to place the texts available on those sites on the search engine indexes to be able to return to them later.

3.8. The importance of search engines: Their importance lies in the fact that they are almost the most important means of research on the digital network, especially for researchers, so it can be said that the importance of search engines can be found in:

-Meeting the information needs of the user in the virtual community by recognizing the features and characteristics of these engines -Recognizing the search characteristics of each engine and thus knowing when a particular engine can be used in a particular situation.

-Developing university curricula to include modern topics related to the Internet to meet the needs of beneficiaries.

- Get quick and clear answers to all the questions that any researcher can ask within the digital environment and specifically from a specific search engine.

4.8. Difficulties in the application of digital documentary research: The search and retrieval of documents within the digital environment is still considered one of the difficulties for researchers, among the most prominent obstacles and challenges:

- The researcher is hampered by automated detection for search and retrieval.
- The researcher is unfamiliar with the strategies and techniques of searching for documents within the digital environment.
- The researcher's lack of proficiency in foreign languages and thus finds it difficult to deal with most of the retrieved documents, especially if they are in another language.
- Access to scanty documents that serve the research area.
- Receiving a large number of documents and thus making it difficult to go through them all and determine their relevance.
- The need for electronic training on documentary research strategies After shedding light on the various documentary research strategies within the digital environment that vary in terms of



difficulty and complexity, there is no longer any doubt that the need for electronic training on these various strategies is an inevitable necessity, and it is no secret that researchers in their advanced stages of research are in dire need of training on the use of digital documents in various forms, and here the role of information specialists appears, especially those charged with training beneficiaries in training beneficiaries on documentary research techniques and strategies within the digital environment, especially since documentary research

In order to achieve the desired goal of satisfying the beneficiaries. Here, we must distinguish between several concepts that are almost close to each other, namely traditional documentary research, digital documentary research, and documentary research through networks and these different concepts. The value of research, whatever its applied or theoretical nature, whether technical sciences or humanities and social sciences, is taken from its information characteristics in all fields of knowledge.

5.8. Self-education and its role in supporting digital research among researchers and students:

Self and distance education is defined as a mass educational system that is not subject to continuous supervision by the teacher, i.e. the separation of the teacher from the semi-permanent learner with the creation of two-way communication and dialogue between them through multiple media, including the printed word and educational media, and its basic philosophy is to transform teaching into learning, thus focusing on the learner and the self-directed educational process (Obeid, 1994, p. 4). Distance education is a method of learning that leads to the promotion of an open learning system, enriching experiences, information exchange and interaction through information sources (Obaid, 1994, page 209) so that the e-learning environment is considered as an information source because of its contribution in providing digital reference materials from books, manuals, courses, university theses, and multimedia from video, audio and graphics presentations, lectures, meetings and conference proceedings.

9. Results of the study:

In light of the data of our study, we reached the following conclusions: First of all, the knowledge of digital research tools with its techniques and how to use automated catalogs or in information banks and databases, or the existence of digital research tools and methods of retrieving them for information sources available in the digital environment through the process of communication through the World Wide Web sites to meet the continuous increasing needs of the researcher and the university student and ways to obtain information to conduct their research work so that he becomes an effective beneficiary within the research system to



which he belongs and active in it and to obtain all the information he needs densely and accurately and quickly he needs a basic base. To invest in a set of research competencies in specialized informatics, because the researcher using the resources also needs these competencies, such as using the computer knowledge and access to the digital environment through tools, methods and strategies that facilitate his research processes, especially those related to searching in search engines and what follows, and how can he search without the correct use of these tools and their sources.

1.Mastering basic search terms and how to retrieve documents from the digital environment is also essential for digital research, because the key to success in obtaining good search results is largely related to the quality of the queries, questions, phrases or keywords used by the user, especially the researcher and the student It does not enter queries or revealed words when performing searches and therefore does not retrieve the requested documents.

2.Among the success factors of the documentary research process, we find the needs of the researcher or student beneficiary: It represents the quality of the interaction between the beneficiary, the system and the environment, whether it is a library environment or a digital environment, if the research statement that represents the document to be searched appropriately, then the research officer can do nothing to provide good search results or to its presentation or something like that, so it may not fulfill its function in the training process for this category of students in particular and exclude its role in participating in training to learn how to learn how to do digital documentary research, and not benefiting the university student from these research methods and the importance of various diverse information sources and search for them on the one hand and the value of the final work passed. The university student's lack of familiarity with these research methods and the importance of different sources of information on the one hand and in the value of the final work of digital documentary research on the other hand.

3. The value of the final work is directly related to the value of the information used by its source to create it, documentary research in general is not determined by the use of specialized research tools in the field, it is a stage that starts with understanding and defining the research topic, and the productive work that is an organized preparation of the information obtained.

4.Research does not mean collecting a certain number of documents related to this or that topic, nor is it a complete reading of specific references and titles, but what is required is Develop a strategy with an appropriate thinking plan that enables the retrieval of research methods to discover the topic and obtain many sources of information.



10. Conclusion

The digital document search process is one of the foundations of library and information science, but as a result of the intersection of technological and technical factors, it still has some complexity despite the efforts of specialists that have been put forward to increase the effectiveness of information retrieval, whether in the library environment such as using catalogs or using documentary software and even in the digital environment using search engines and other research tools. The reason for the lack of training on document search and the complex management applied in most information systems from university libraries may be an important issue that we must know. The success of the document search process depends on a set of factors and requirements.

Finally, there are several criteria for evaluating the results of information retrieval, the most important of which are statistical criteria such as accuracy and retrieval, but the emergence of the concept of accurate and relevant information resulted in the existence of other factors related to the users that may affect their satisfaction with the research result and their judgment of the documentary system.

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