Mechanisms for the Appraisal of Electronic Information Resources

Mohamed Nigresh¹

¹ Princess Alia University College, Al Balqa Applied University, Jordan

Correspondence: Mohamed Nigresh, Princess Alia University College, Al Balga Applied University, Jordan

Received: August 15, 2018 Accepted: September 30, 2018 Online Published: January 30, 2019

Abstract

This research discusses the electronic resources, types and divisions, it also deals with mechanism for evaluation resources of electronic information in general with concentration on concept of assessment and evaluation objectives as well as the organizers of the process in addition, the research also shows benefits of evaluation and its impact on the services beneficiaries of electronic information resources along with explaining the obstacles that hinder process of assessing resources of electronic information including a set of principles that serve assessment of resources for electronic information and finally, the research concludes a set of recommendations that serve the evaluation process.

Keywords: libraries, electronic resources, mechanisms, electronic information, evaluation objectives

1. Introduction

Libraries and information centers have witnessed nowadays rapid and dramatic changes as a result of quick growth in communications and information technology with emerging of advanced techniques for processing, storing, publishing and retrieval of information. Moreover, due to comprehensiveness of human knowledge resources, daily media flow and advancement of scientific studies on all various types, there must be a system assigns to retrieve information flowing tremendously. It is noted that quite a few of library institutions and information centers hastened in using modern technologies specifically, –the computer–for employing them in performing their missions and achieving their objectives.

Subsequently, the computers are considered a civilization that created by Man where, it was impossible to ignore them because they were beyond the human intellect and their role in keeping the heritage of mankind from loss cannot be ignored. Besides, computers make the vast distances closer between the nations which help each one of them displays its skills in building human civilization along with awakening dormant minds and alerting them to keep pace with progress quickly than we expect. Due to increasing diversity of needs of beneficiaries and researchers for information across networks teeming with resources of electronic information on the various types and the rapid spread of the output of intellectual -mail which contain mixed between bad and good ones due to lack of laws and legislation protecting electronic information resources in addition to need for workers in this sector to continuous training to keep them informed about these developments and to improve their performance career with our keen to provide a full picture of the electronic information assessment process, but with insufficiency of evaluation models for these resources in the Arab world where the previous experience as well as the published studies on this subject indicate that there was great difficulty in evaluating electronic resources in particular which require quality and high accuracy, because much of the available information, especially on the Internet may not be reviewed and inaccurate. In most cases, it is difficult to know responsible person for the intellectual content for the electronic resources of the electronic files, besides, it can be difficult to know degree of updated, comprehensiveness and completeness of the information prior to its submission to the beneficiaries. Additionally, there is a lot of electronic resources, which includes stereoscopic or voice forms accompanying information, but things should be taken into account when assessment should include evaluation and judgment on electronic resources element of reliability and constancy of the source in a specific location for unchangeable on the Internet which includes a refresh rate whether information is available on CDs, or files through electronic databases and data banks or available on the Internet. All these facts made the researcher to conceptualize a concept or basis for evaluating electronic information resources as an important reference for information in the era of scientific great prevalence and multiplicity of forms in the electronic publishing as well as the media that carry the information.

Afterward, it is essential matter that we have to conduct a study for evaluating electronic resources of information



ies.ccsenet.org International Education Studies Vol. 12, No. 2; 2019

to find out whether the library/information center is ready to face the future demands?

Concerning of this assessment, the librarian can change a lot of daily procedures or replacing them with new ones, if necessary, until the library (Knowledge Center) developing and evolving at all times and keep pace with the functioning time goal of the information revolution and ever-changing needs of the readers.

Based on aforementioned facts, importance of our research emerged because the electronic information resources are an important reference for obtaining the data that are to be retrieved in fastest time and easiest possible way.

1.1 Objectives of the Study

This study aims mainly to provide libraries and information centers with definition on how to evaluate resources of electronic information as well as what are foundations and steps to be followed during the evaluation process for identifying the extent of keeping up libraries and information centers that they acquired and their utilizing level besides the actual usage for them to improve the performance of the professional staff and upgrade electronic information resources which the libraries and information center participate in them.

1.2 Importance of the Study

Importance of this study lies on periodic evaluation significance for resources of information, along with an urgent need for libraries and information centers to an adviser who instructs them on how to evaluate this category relatively unfamiliar to them –information supplies. Additionally, evaluation of electronic information resources in libraries and information centers shall make them to play the required role which made them decent leading to upgrade their degree of services that help them to keep pace with existing development in the information sector.

1.3 The Research Problem

Shortage of methodological bases for evaluating the resources of electronic information.

1.4 Question of the Study

The study seeks to answer the following question:

What are the sources of electronic or paperless information? Is it traditional printing sources which we have become accustomed in our libraries in a new shape? Or is the information transmitted electronically from the original producers such as (authors, writers and researchers.... etc.) to beneficiaries without being on paper content?

1.5 Terms of the Study

- 1) Evaluation: It is the main topic of the study which means measuring the performance of work.
- 2) Evaluation Steps: Our only aim is to recognize evaluation operation stages for the electronic resources.
- 3) Beneficiaries (users): They are all who receive results of information services such as: Scientists, researchers, students, employees, and others.
- 4) Paperless resources of information: It includes every known source for knowledge from traditional resources of paperless information which is electronically stored on magnetic media, or Laser of all kinds.

2. Review of Related Literature

2.1 Theoretical Framework

Definition of Electronic Information Resources:

Information recorded in the memory which maintained past information to be starting point for present as well as the future where the book history which is the history of the human desire to save the inherited intellectual and made it available to subsequent generations over the ages of man where he tried to record his feelings and actions on walls of caves and caverns and then on clay boards, palm fronds and papyrus and after that on the paper, cassettes records, CDs and finally on the computers and Internet.

This is the modern era is to develop, change and continuous inclement in this era where the human knowledge and thought emerged with unprecedented start following scientific discoveries which are constantly increasing, intertwining and overlapping disciplines and areas of jurisdiction.

It has acquired rights during the second half of the twentieth century alone information beyond what earned them during its long history so that some scientists say that the record of human knowledge is doubling every ten years, and this is what makes many scientists and researchers calling of our time this name:"Era of Explosion of Knowledge and Information".

It is no longer that the library is considered just rooms and halls containing shelves with some books, periodicals



and papers documentaries but it has become an important center for information of all forms of knowledge and contains everything available where resources in the hands of the researcher as well as the user to be able to take advantage of the largest amount of information.

Life of modern man and his requirements have become completed nowadays including his needs to information which its sources at traditional library cannot meet these needs and requirements where they should adopt with this new technology environment.

Subsequently, actually turning many forms of information sources and developing ways to get them into effective patterns that have the ability to keep up with needs of growing multi-beneficiaries with their new aspirations in an electronic society, which gradually is directed to paperless information source.

Therefore, electronic information sources become an active and influential part in entity of libraries as well as information centers and a key feature of this age besides, it is an urgent and necessary need to enter into the twenty-first century including emerging electronic publishing outcomes.

2.2 Previous Studies

Several studies were conducted by many researchers about using technology in general and Prezi program in particular to teach language skills.

Rehab (2015) conducted a study entitled "Evaluation of the sites of digital libraries on the gates of Egyptian universities: a comparative analytical study". The researcher tackled the topic of digital libraries at the Egyptian public universities' gates in the light of some criteria and evaluative elements. Among these reasons is the increasing growth in the locations of digital libraries and their application in many Egyptian universities, which necessitates integrating them into university gates, which raises the ranking of university gates, Specific principles and principles must be established for planning and developing digital library sites to provide equal and fair opportunities among students, faculty members and researchers. The study seeks to be the nucleus of a major strategic plan for the development of university sites in the Arab Republic of Egypt. The study reached many results, including the location of the digital library at Fayoum University with a score of (64) degrees out of a total of (114) degrees, followed by the website of the South Valley University Digital Library which achieved a total of (59) degrees. The total of three universities is between (41) and (46) degrees, which are Beni Suef, Alexandria and Ain Shams. The study recommends the need to seek to create a standard form for the design of digital library sites on the gates of the Egyptian public universities and the interest in the existence of information services suitable for all users of digital libraries whether they are students or researchers or faculty members and others.

Al-Harbi (2014) conducted a study entitled "Sites of Saudi University Libraries An evaluation study of university library sites in the Kingdom of Saudi Arabia). This study dealt with the most important criteria that the Saudi university library sites have, which is available on the Internet, to assess and contribute to its direction and those specific to the subject of the study (general content, Format, availability) and 9 Saudi university library websites were adopted. The descriptive analytical method was used to analyze the content of the evaluation for the sites of the Saudi university libraries, and the study concluded that there is a large difference in the degree of interest in electronic websites between the Saudi university libraries that have been studied, some of the websites were marked by interest by the university and others of which failed.

A study conducted by Hashim (2006) entitled: Assessment Methodology and Standards of Sites on the World Wide Spider Network "Web" from the Ninth Conference of the Arab Federation for Libraries and Information activities where this study indicated necessity for existence of criteria or standards based for judging quality of Internet sites.

Moreover, this study discusses evaluation standards generally as follows:

- 1) Easy access to the site and its continuity.
- 2) Audience of the Web site.
- 3) Attribution of responsibility including intellectual, site management and revision
- 4) Information updating
- 5) Content in terms of kinds of information, language, area of coverage and depth of processing, objectivity and publicity
- 6) Processing and information organizing in terms of: accuracy and interact with visitors besides providing information on request
- 7) Form of information organization based on planning skills for securing location of the sate aesthetic and its connection on the other hand.



ies.ccsenet.org International Education Studies Vol. 12, No. 2; 2019

A Study conducted by Hassan (2002) entitled "Evaluation of electronic reference available information resources on Internet web sites and CD-ROMs, Journal of Modern trends in libraries and information in volume 18 (2002) where the study deals with the electronic information resources on Internet and CD-ROMs and their special and general defects. Additionally, the study proposed criteria for evaluating resources in CD-ROMs.

A study conduct by Hijjawi (2000) entitled Scientific Method to Evaluate Databases, Arab Journal of Information, P, 21 - Scientific Method to Evaluate Databases from librarians' perspective. In this study, the researcher defines database evaluation as follows:

Knowledge of performance, efficiency and identifying weaknesses and imbalances for development:

Dr. Hijjawi indicated in her study that the evaluation aims to the following factors:

- 1) Confirmation efficiency of performance of databases in various administrative and technical aspects.
- 2) Compliance of the rules with objectives assigned to them.
- 3) Identifying deficiencies in the rules and correct evaluation methods accordingly.
- 4) Classifying techniques to qualify the correct databases to work efficiently.
- 5) Development of work style at the database.

Al-Jebri (2000) in his study entitled "Evaluation of Internet Available Information", indicated difficulties facing Internet Web Sites evaluation operation such as:

Lack of evaluation standardized formats and models for establishing information sites on Internet and a lot of sites overlapping with each other through links and instability of the sites and their contents portability for change and replacement.

This study also shows that the most prominent evaluation features are those which share in most referred operations fall under five categories, namely:

- 1) Intellectual responsibility
- 2) The objective content
- 3) Information updating
- 4) Web designing
- 5) Access to the site

Al-Jebri (2000) in his study provides a model that contains twenty-five standards for measuring quality of Internet site. After reviewing these studies, we can confirm that there is no study indicating existence of Arabic evaluation for electronic information.

3. Methodology

The researcher in this study adopted the theoretical approach for literature relevant to the subject of the study as well as reviewing some experiences of libraries in this regard.

The question that arises:

What are the sources of electronic or paperless information? Is it traditional printing sources which we have become accustomed in our libraries in a new shape? Or is the information transmitted electronically from the original producers such as (authors, writers and researchers.... etc.) to beneficiaries without being on paper content?

The answer to this question is determined by Wilfred Lancaster in two attitudes:

The First Attitude:

It is about everything that is currently available from electronic sources of information within the direct contact (ONLINE) or CD-Rom which is common at libraries and information centers and other agencies that deal with these techniques are in fact the same sources of the traditional paper that we were dealing with its content and arrangement (as text), but, it is stored and transmitted or restored (as information) electronically.

The Second Attitude:

The sources of electronic information at developing concept do not cancel presence of the container and paper usage while, it only provides direct communication between the information producer on one hand and beneficiary or its user on the other hand which aims to change the comprehensive common shape of the paper or the printed book for ensuring this concept which will be the source of the paper information since beginning as it shall appear



in form of multiple paragraphs because each author will enter data by the other one and according to special software designed for this purpose for ensuring distinction between the various paragraphs in the article one or various chapters of the book is the one to ensure regular restoring to excerpts from several authors in one subject.

From these attitudes, we can figure out a comprehensive definition for the electronic information sources as follows:

- 1) All what is known from traditional and paperless sources which are electronically stored on discs whether they are magnetic or laser including their various types.
- 2) Or stored paperless sources which are also stored electronically upon producing from their publishers (Authors and Publishers) in databases folders as well as in information banks available to beneficiaries through direct contact (Online) or internally at the library or information center by CD-Rom besides other advanced electronic means.

3.1 Importance of Electronic Information Sources

Electronic information sources imposed itself strongly on libraries along with knowledge and information centers as a new materialistic technological form which Commensurate with developments in information technology.

Therefore, the electronic information sources or as it is sometimes so called the computed information sources which include data and the stored electronically information on magnetic discs or laser which are available through computers as or via remote range communication networks have widely spread remarkably in recent years due to their great important features as follows:

- 1) Speed: as procedures required documentation of information and different sources contents which are much faster when using computers, especially with regard to information restoring.
- 2) Accuracy in information storage and restoring.
- 3) Saving human efforts.
- 4) Information quantity: Since that volume of information and documents stored by conventional methods is limited, whatever the size of human potential and spatial capabilities comparing to growing computers, memory storage and storing of electronic and laser.
- 5) Available choices in information restoring at the computer systems are bigger and better.

Consequently, Von Ungern determines four advantages of electronic documents in libraries and information centers as follows:

- 1) Some of the documents are more useful in electronic form as a result of promotion, support of research capacity, treatment and processing.
- 2) The electronic format is the alternative/only choice in front of the library in relation to some of the sources of information.
- 3) The volume of printed materials continues to grow at a high rate and the library would be unable to afford the acquisition of this large amount and therefore the electronic alternatives overcome this problem.
- 4) Storing economics increase in cost of maintaining printed materials which make electronic forms are more attractive from economic prospective.

Electronic information are distinguished that they are very modern, updated and added to them constantly, as well as they are characterized by research-mail anywhere in the world from the house during day and night and every day of the week and during holidays instead of going to the library building and what can be obtained in hours information where it was obtained in the weeks or months at the library, additionally, the researcher can get the articles needed immediately that can be printed or downloaded directly on the screen or e-mailed to someone else instead of a request from the outside and wait for the arrival mailed long months in case of the libraries.

This offers a vast amount of electronic information and digital considerable benefits for university professors, students and researchers because of the ability to search for a large amount of information much faster than manual search in the printed sources of information.

It also enables them to discover the information electronically in ways that cannot be detected in traditional search library catalogs or printed references.

In area of teaching the information available electronically helps to update content of courses permanently and facilitate the learning process.



In area of scientific research, electronic reference encourages rapid progress in research as well as in intellectual communication between researchers besides being informed about the new discoveries.

3.2 Types of Electronic Sources of Information

Internet is considered today the most important sources of electronic information because of communication easiness and circulation of information that has started at all several information centers of knowledge and scientific offering their services online, as many ancient world libraries were started to transfer their information to electronic information tradable online and this makes research methods much better than the traditional methods.

Subsequently, the question remains, is Internet the only source of electronic information or is it one of the multiple electronic sources?

Many researchers in this area have divided sources of electronic information to various types depending in its processing method.

The researcher concluded that sources of information are involved into several three trends where the most ones of them as follow:

- 1) Conducting researches through direct contact (Online Search) Researchers beneficiaries of computers to banks and observatories regional and global information which are ready for marketing such as: Dialog
- 2) The second trend is direction research in disk laser as included at the beginning: Read what is in the memory: CD-Rom.
- 3) Finally, the Internet: It represents value of development in field of information technology besides use of computers to access to various types of information sources.

Some of the researchers divided electronic sources of information into types differ from the previous ones as follow:

- 1) Electronic Contents: They consist from Microfilm-Microfiche-Trafish.
- 2) Electronic library consisting of: Magnetic tapes and disks as well as direct contact (Online) and CD-Rom.

Moreover, in this regard, Samurai researcher offers a comprehensive vision and detailed information on the various types of electronic sources of information and multiple angles by dividing electronic sources of information into four categories:

- 1) In accordance with objective coverage.
- 2) By availability.
- 3) According to types of information
- 4) According to producers.
- 3.2.1 Types of Electronic Sources of Information According to Authorities
- TV
- News
- General
- Offline
- Online
- CD-ROM
- Non-Bibliographic
- Digital Bibliographic
- Full Text Digital
- Non-Commercial
- Commercial
- 3.2.2 Types of Electronic Sources of Information According to Type of Information

Perhaps the clearest division from the perspective of the researcher, the one executed by Guendhilji (1999) where he divided electronic information sources into three types:



- Magnetic Tapes
- Magnetic Discs
- Computer Programs
- 2) Laser Resources
- Compact discs CD (Musical)
- CD-V
- CD-Rom
- CD-1
- DVD
- Multi Media
- 3) Internet
- E-Mail
- www
- Discussion group
- Other applications and Usages
- 3.2.3 Types of electronic sources of information According to availability
- Internet
- Laser source
- Computerized Sources
- Magnetic Tapes
- Computer Programs
- Magnetic Discs
- CD -1
- CD Rom
- CD V
- Compact Discs CD (Musical)
- DVD
- Multi Media
- Gates Digital Library
- Discussion groups
- E-mail
- www
- 3.3 Sources of Information: From Manuscripts era to Internet Time in 2000

We will not go further in discussing various divisions in which the electronic information sources were processed where these sources are varied from one researcher to another based on his prospective to these electronic resources.

Therefore, it is not important the information source is magnetic or laser or via direct contact (Online) or through Internet as far as storing information in that source besides maintaining and benefiting from them and transferring them from one generation to another.

3.4 Evaluation Linguistically and Idiomatically

We all evaluate all the time.

We all review and verify our work daily.

Do we have a sufficient budget to buy what we want? Did we buy what we needed actually?



Did we achieve the desired purpose?

In addition to normal daily matters, of course, we do not call things like these evaluations but, we check t, or look closely on them and we practice as they are all an essential part of our daily lives.

Without that verification, we may fall in fatal mistakes or forget to implement certain missions or miss a unique opportunity. Therefore, we check our work, establishing lists and maintaining memos as well reminding ourselves about incomplete missions or the ones that they should be implemented.

We automatically establish for ourselves procedures to do a job evaluation beginning with questions that cannot be answered only through the search for new information that could help us to reach satisfactory explanations.

But, we ask the following questions: What kind of information? And where should we inspect about them? And how do we get them? And if we succeed, does this appear to us that they are all the information that we want to know? And what is their impact on our decisions and businesses?

3.4.1 Definition of Evaluation

It is included at Oxford Word Power dictionary that definition of evaluation means estimation as a translation for it. It is also stated in the definition of evaluation that "Evaluating the thing as estimation means estimated its value" and evaluating the thing means (Knowledge of performance, efficiency and identifying its weaknesses and failures points with a view to its development).

Additionally, there is another definition for evaluation states the following: evaluation linguistically means: "Adding value to it or the person depending on its degree of harmony with the intended purpose"

Therefore, the evaluator determines the conditions and studied them in range of circumstances and objectives and then he makes his judgment based on a standard or several criteria. In addition to evaluation systematically, we can define it: "It is the process in which we can determine the objectives and then studying data in context of their circumstances quantitatively and qualitatively for identifying how it approached the targets and subsequently pass judgment on the evaluated matter and the extent of its relevance using criteria or suitable standards for that.

Moreover, evaluation in general is: (Giving a value for behaviors and things as well as, it is also issuing a moral and qualitative judgment about individuals, objects or events).

It should be noted here that some researchers tend to consider that straightening has the same meaning of evaluation as included at Dictionary of Asahah that evaluation is: Evaluating the thing as it is straightening it upright.

Some researchers also tend to consider that evaluation means straightening the warping besides denoting value of the thing in itself.

It is probably that the difference between the two pronunciations that when we evaluate the thing, we recognize its performance, efficiency and its harmony with the planned objective where, this thing fulfilled its target or it may be achieved a progress in its objectives or it did not achieve that goal, in this regard, the evaluation function is to specify the weakness points aiming at correcting track and developing it.

But, when we evaluate, we accept initially that the object has not achieved its target, in this case, we determine the deficiency and weakness points attempting to correct the malfunction, it is probably that using these two pronunciations frequently led to their interfering as well as mixing them and imparting the same meaning to both of them.

In this our research, we evaluate to recognize usefulness of objects and their entities where we add more value and great deal on them but, If we had an error in our performance evaluation process and so we efficiently evaluate in order to communicate for achieving the maximum possible benefit and desirable from sources.

3.4.1.1 The Evaluation Function

In view of aforementioned data, we can figure out that the evaluation function is as follows:

Estimating the work efficiency and the extent of its conformity with the desired and provisions targets relating to the issuance of this recognition and evaluation is not limited to just for description the process of measuring and comparing the levels nor on adjusting of all that work but it exceeded that beyond following-up work and guidance to the right path and then developing it.

3.4.1.2 Importance of Evaluation in General

The first thing that comes to mind at this point is why the evaluation process primarily?

Evaluation is vital factor for institution operation in general and sources of information in particular, as well as it is



one of the important indicators that shows efficacy of the organization and its relationship with society as well as the beneficiaries in a good standard to measure the work efficacy of this institutions or in provisions of those services for achieving their goals.

Evaluation is considered as an essential part, and when we do any substantial work in addition to aforementioned factors, there are several reasons to do the evaluation process as follows:

- 1) Giving objects value and increasing their importance.
- 2) Achieving the work desired objectives.
- 3) Looking for future successes.
- 4) Identifying the problems and attempting correcting the weaknesses points at this work.
- 5) Evaluation provides us with information that helps us in developing our electronic system in the future.
- 6) Evaluation provides us with support from corporation directors.
- 7) Evaluation is a guide for future plans and objectives.
- 8) Evaluation provides decision-makers with useful information.
- 9) In addition, evaluation provides us with a guide which might be useful in other works in the organization.

It is likely that evaluation handles several issues as follows:

- 1) Handling strategy of the institution/library and its financial plans.
- 2) Handling needs of the beneficiaries of the work of this institution or the other one.
- 3) Addressing the requirements and needs of the institution.
- 4) Address the goals of the institution/library.
- 5) It helps us upon inspection operations.
- 3.4.1.3 Evaluation Objectives

Evaluation has several goals, including the following:

- 1) Confirmation of the work efficiency in various aspects (administrative, technical, economic...etc.).
- 2) Matching level of the work to its specified objects.
- 3) Identifying existing deficiencies and correcting their methods of utilization.
- 4) Determining the correct ways to do a job efficiently.
- 5) Developing work techniques to get better services.
- 3.4.1.4 Evaluation of electronic Information Sources

Importance of evaluation process is shown through its significant position status to researchers, beneficiaries as well as workers who want to get the information.

Furthermore, our dependence on information increases every day as individuals or organizations need information for economic structure of society and as nowadays, it is era of scientific and technical progress that we encounter which depends on research and planning that are considered a basic information foundation. Therefore, the flow of information plenty and strongly is necessary to conduct research and reach for results of scientific and publishing them to achieve human development and education rights and expansion of waking his intellectual faculties comparing this matter to blood flow into human body to keep him alive.

We find after this shift in patterns of information sources that the future is for electronic sources of information as they will become e dominant with the survival of traditional sources (paper) and non-traditional (Audio, Video and Miniatures), but using more limited than here which led to evaluating sources of electronic information, the importance of evaluation lies in the importance of these same sources.

It is noted that quite a few of the establishments, libraries and information centers have hastened in using modern technologies, Internet and employing them as a principal source of access to information.

It is also known that a number of other looking forward to the same stage and it is essential that we evaluate these electronic resources.

Consequently there are models of these libraries which have emerged at developed countries as they enter gradually into the Arab world.



In New York, Business Library, Industry and (SIBL) was established which includes Electronic Resource Center Which is linked to a network composed of seventy works station that provides access to more than (100) database operated by compact discs CD-Rom as well as folders, newspapers and full texts on the Internet where it also provides access to the World Wide Web www.

In San Francisco Public Library (SFPL) was established. It is also connected to a computer composed of large (1100) workstation provides access to the Internet and contain evidence of Multi Media products, besides it include electronic discovery center for children and provide access to databases and digital text.

It is noticeable that major libraries complexes in France, Britain, Germany and Japan built or re-organized and equipped with the latest technological means shelves, information technology and networks that provide access to the Internet and electronic sources on CD Rom.

Same procedures are applied on the Arab world where all major libraries started using the latest modern information technologies, especially at newly established libraries.

In Alexandria, a great library was established for resuming cultural glory which was executed by Alexandrina historical library, but the recent one was established according to latest techniques of information technology containing eight million books, fifty thousand manuscripts and fifty thousand maps. It also includes fifty thousand audio device or visual or computerized database (OPAC). It too provides for its customers possibility to access to Internet via fastest on line information whereas this library is not a reference nor it is not a source of information for Alexandrina City neither to Egypt only, but it also for researchers and those interested in the Arab countries and the Mediterranean Area where they can access to their databases via confidential information techniques.

Additionally, in 2000, the library was opened in area of electronic Solidere in Beirut within the scientific museum for children sponsored by e Microsoft Corporation.

Libraries issue is not limited to Egypt, Lebanon, but it went beyond that to more Arab countries as in 1984, Assad National Library opened in Syria which concentrate on full of cultural heritage and national scientific since its opening.

Library has focused on utilization on databases since its opening where it participate at International Network (Dialog), which provides information on all subjects through direct contact. It has also prepared jointly by rules of information on laser disks to be used within the library. Besides, it has focused on the other hand about events of national databases.

The aforementioned library started a remarkable step towards scientific advancement where its participation in International Internet Network for obtaining Internet service during 1998 for beneficiary of its database and placed them under service of readers in addition to E-mail service.

In addition to Assad National Library in Syria, there are many cultural centers and specialized libraries as well as other institutions that follow the latest and best modern technology including but not limited to: British Council - Library of Atomic Energy Commission - Library Center for Studies and Scientific Research - National Center for Agricultural Information and Documentation - Library ICARDA in Aleppo.

upon this widespread use of electronic sources of information, whether in the world or the Arab world, importance of evaluating these sources is shown clearly in their important place for researchers and beneficiaries, employees and decision makers who wish to obtain information and even evaluated them correctly for evaluation of effect on activity of the institutions that evaluation aimed at achieving their goals from one hand and developing them on the other.

However, it seems that institutions or libraries that are suffering from shortage of electronic sources of information are the most needed ones to conduct the evaluation.

3.4.1.5 Evaluation Obstacles for Sources of Electronic Information

A lot of institutions are unwilling to evaluate their electronic sources, if the evaluation will achieve the best level of provided services, what is the reason for its resistance (or opposition)? Subsequently, we must realize that evaluation is not an isolated event, but rather, it is not an integral part of planning for department's top for this institution or that. It is clear here that the institutions which prepare a written statement for specifying their targets have the biggest potential in use of methods of evaluation of the libraries that do not identify their targets.

There are matters that prevent an evaluation for sources of electronic information:

1) Perhaps the first factor is not administration's commitment to evaluation in their work where it is not enough just



to collect evaluation data and statistics approaches because if it is considered that evaluation is to be effective, administration should be ready to make use of its production changes in subjects that directed towards indicators.

It is probably, the reason for not holding the required changes to some logical reasons such as lack of financial resources needed to solve the problem.

This aforementioned matter might be overcome to some extent, if the evaluator to take a positive role in supporting use of information for not only assumption that management will adapt its behavior based on the final report of the evaluation.

Furthermore, it may be useful to devote a special part of the general budget for such cases evaluation approaches on the grounds as it is an essential part in the financial schemes of the institution.

2) Among other things that prevents the evaluation process are: Humanitarian and literary background to some of the workers who may do not have experience or knowledge of electronic sources of information or even an analysis of field data.

Managers of public libraries indicated in a recent study that some employees lack even simple skills to conduct evaluation studies.

It can overcome this problem by continuing education for those conduct field studies containing evaluations of these sources.

3) Managers fear that libraries or institutions and their employees may not understand nature of the evaluation for a full understanding of the final results which can be considered another obstacle for evaluation of electronic sources.

The workers often fear emergence of any ambiguity in state of this source r that reflected negatively on their own abilities and affecting their decision making on supply of such an electronic source that may have high costs.

However, the evaluation does not intend to disclosure the gaps in order to punish its owner, but it should be active developmentally as it has to be completed for improving the services, whether it carried out by individuals themselves or by the institution itself.

Evaluation results should indicate objective data which identify the strengths and weaknesses of the source of information for supporting affirmative action and rectify the negative action by training workers and providing them with appropriate information sources for them.

The ultimate goal of the evaluation that each person can support them as follows:

Improving the services provided by the beneficiary and then developing them:

It is probably, one of the best ways to overcome fears about evaluating electronic resources among workers is to engage the experienced ones from them in/evaluation process/deeply qualified expertise ones/who have full knowledge about current sources of electronic information as well as beneficiaries needs and the allocated budget to this process and its available capabilities, in addition to, they have to be aware of the objectives/Corporation/Library.

4) There are other obstacles that prevent the evaluation of electronic information sources, specifically lack of staff enough time. Many of the workers do not have sufficient time to collect adequate data to carry out the evaluation and this obstacle cannot be considered amazing as long as the institution did not cost the assigned individual to carry out the duties of the evaluation of these sources, but, the institution waits instead that the regular workers shall implement the evaluation in addition to their original duties.

In such cases, reliance on a consultant or an expert from outside the institution to carry out main evaluation may be the best way to overcome such difficulties.

Organizers of evaluation process for the sources of electronic information:

Selection of an evaluator is the hardest and most important decisions that must be taken into account in this institution where there are two options in this regard, but they can be combined them in one: Either the workers themselves or the institution will implement the task of evaluation and this is called an internal evaluation process or subjective evaluation or the institution assigned someone from outside its scope and pays his wages for executing the evaluation which is called an external evaluation.

Many of the institutions have to combine the two options (internal and external evaluation) by doing part of the evaluation function internally as well as requesting outside help in this evaluation.



These options are usually used in the circumstances which depend on nature of the evaluation itself, whether that were needed outside help or simply self-evaluation or involving both of them.

There are several points to be considered when choosing based evaluation of electronic sources of information:

- 1) The evaluator should have a genuine interest in goals of the institution and engages its members with the knowledge that he obtained.
- 2) It is best not to entrust process of sources of electronic information evaluation to an external attribution completely, but there still remains a need for participation of employees of an organization in this task.
- 3) The essential characteristics of a good evaluator summarized in his integrity and objectivity, faithfulness, openness and these properties are not less significance about importance of experience and competencies of professional and technical sources of electronic information.
- 4) Institution can estimate the costs of the evaluation process in the case of doing a self-evaluation or assigning this task to an external organization.

Beneficiaries of evaluating process of the sources of electronic information:

We mentioned previously, the reasons that explain importance of doing the evaluation process in general and as well as evaluating its sources of electronic information, in particular, but when starting the evaluation process itself, the workers have to ask themselves the following questions:

To whom we implement this work? To whom is this work directed? In other words: For whom this evaluation?

There are a number of groups interested in evaluation of electronic sources of information, and these categories are:

- 1) In the beginning, there is an important category who is the institution employees: They need to know how things are going? Does electronic source fulfill its target? Is there a need for a change in the source or taking substantive decisions relating to public policy that must be encountered?
- 2) A class of decision makers in the organization they need to evaluative information source for this or that to make appropriate decisions.
- There may be others, supporters and participants in the organization and perhaps other agencies participate in supporting information they need to encourage them and push them to support the process.
- 4) Sometimes there are local community and the beneficiaries of this source and who want to know what is no doubt achieve sources of electronic information and the benefits of the most important developments.
- 5) There may be politicians and influential owners, advisors and community leaders need to summaries of evaluation results of this electronic age or the other.
- 6) There are probably specialists in field work of the institution eager to learn which the institution reached about process of evaluating electronic sources to take advantage of their work and may also result from this interest their participation among institutions through electronic sources of information.
- 7) It is often that press and media are always interested to hear what's new.

Therefore, in viewing all above points about evaluation, we have to consider upon execution of the evaluation process to account for all of these categories, besides providing the results of the evaluation based on scientific facts that can be verified.

Types and levels for electronic information sources of evaluation:

It is useful here to learn about some of views that tried to divide the evaluation process for electronic sources of information to types including:

There are those who state that the evaluation of electronic information sources is divided into three levels:

- 1) Effectiveness Evaluation of Electronic Information Source: It means how the electronic source fulfills all the requirements which the beneficiary needs? To what extent does it keep up with organization objectives?
- 2) Evaluation of Cost-effectiveness for Electronic Source of Information: Such a study shall measure adequacy of source of electronic information (In terms of Cost) in achieving its purpose.
- 3) Evaluation of cost-benefit of electronic information source: At this level, there is an attempt to determine whether the profits from this source to justify the expenses that the institution entrusted to supply it.

Some researchers concluded that the evaluation is two types as follows:



- 1) Comprehensive evaluation: This type of evaluation is distinguished by its descriptive nature which measures rate of success of the electronic information source.
- 2) Partial Evaluation: It defines as a diagnostic evaluation based on data gathering that describes how they are using electronic information source as well as the factors behind its utilization in this manner, including young people, which will lead to occurrence of weakness or error.

Some researchers have identified two terms of the evaluation, it is possible to be: Formative or Summative.

- 1) Formative evaluation: It produces information that represents repeated evaluation for processing the source of information in the mail to help improving it.
- 2) Summative evaluation: At end of the acquisition process in order to measure general overall success or failure of the overall electronic source.

We tend to consider that evaluation of electronic information sources have two types:

- A) During evaluation process of selecting the source of electronic information before its actual acquisition.
- B) After evaluation process of selecting the source of electronic information before its actual acquisition where this level objective is one of two things:
- 1) Evaluation for raising efficiency of electronic information source.
- Evaluation after one year from electronic source operation for raising its efficiency as well as reviewing its work.

Whatever the type or evaluation status, there are certain criteria that is important to be taken into account when carrying out evaluation of electronic information sources.

Proposed Standards for Evaluating Electronic Sources of Information:

Widespread use of electronic resources in addition to the differences in the components and elements from those printed after had a clear impact in necessity about existing of its own evaluation criteria. The specialists believe that the general philosophy for evaluating the source individually, it will be one, no matter what the form in which it is made traditionally or electronically source and that the details of the items will be included in the evaluation and its method must be highlighted which varies between the two types of disparity for nature of the format. This has led to a multiplicity of Arab and foreign attempts to establish standards and elements that can be through them, evaluation and selection of electronic information sources can be implemented, which corresponds to the specialists, are the following.

- 1) Matching targets of the source of electronic information with objectives of the institution.
- 2) Available budget in the institution and the extent of the current costs for the source, besides the future costs to update and develop this source.
- 3) Feasibility study and justifying purpose of this electronic source and work cost and its development.
- 4) Existing of an organization responsible for decision making to supply the electronic source.
- 5) Number of beneficiaries of the source of electronic information categories.
- 6) Type electronic sources and the appropriateness of equipment and compatibility to deal with this source.
- 7) Value of information and its usefulness in this source.
- 8) Updated information on source and integration of complete objectivity in terms of their coverage and diversity level and the extent to which this source tendency for development and modernization.
- 9) Base of use and information retrieval.
- 10) Ease access to information in this source.
- 11) Accuracy in obtaining information.
- 12) The average time of the search in electronic source and extent of the effort in the search.
- 13) Language of the electronic source of information.
- 14) Free electronic source of errors.
- 15) The one on charge/author of this source (Author).
- 16) Measure degree of satisfaction of the beneficiaries from the source.



4. Conclusion

As we are still beyond the time for using modern electronic sources where we do not have basic elements, steps and foundations for selecting the electronic source neither, we do not have criteria for evaluation the electronic information during their use, but we have to believe that electronic source forthcoming by virtue of technological progress and knowledge and the conflict between the source paper and paperless in which existence is for the modern source (The Electronic) because the environment and the time factor today along with message of our libraries and centers of our information that cannot succeed unless there is all source of knowledge is for providing our citizen's life with the required information that be accompanied them as children, young individuals, and old men as we supply them with intellectual, artistic and social information.

Consequently, if the schools function nowadays is to teach the students reading and writing whereas the libraries and information centers function are to teach art of Living by broadening their experience, showing their talents and informing them of the global knowledge.

Therefore, we have alone as librarians the responsibility to choose the right source for this new trend and follow-up over its use for benefiting from evaluation and radically reforming and modernizing its information according to scientific standards in its evaluation and procurement in order to achieve maximum benefit for researchers and seekers of science and knowledge. Accordingly, we contribute to the creation of the faith in our offices as well as our data centers as institutions which are capable for responding to demands of raising educational levels and cultural life of society that have become outdated and unreliable or difficult to be obtained.

References

- Al-Bashir, I. (2008). Evaluation of sources of reference information. Journal of Information, 33.
- Al-Harbi, W. (2014). Sites of Saudi University Libraries An evaluation study of university library sites in the Kingdom of Saudi Arabia (Unpublished master thesis). University of Taiba, Faculty of Arts and Humanities, Information and Learning Resources Section.
- Al-Jebri, K. (2000). Evaluation of information web sites available on the Internet. *Journal of King Fahd National Library*, 5, 2.
- Al-Maliki, M. (2003). Electronic Library in New Technological Environment. *Journal of King Fahd National Library*, 8(2), 34-37.
- Al-Samarrai, E. (1993). Electronic Information Sources and their Impact on Librarie. *Arab Journal of Information*, 14(1), 58-83.
- Al-Shami, A. (2001). *Arabic Encyclopedia of library information and computer terms*. Sayyad Haspallah-Cairo: Academic library (Vol. 3, pp. 23-69).
- Arifi, S. (1999). Measurement and Evaluation (4th ed., p. 266). Amman: Dar Majdalawi.
- Ayoub, J. (2000). The scientific method in the evaluation of databases from librarians' perspective. *Arab Journal of Information*, 21(1), 22-56.
- Fasheh, M. (1996). *Approach to provide a practical evaluation and its application in the field projects* (Aiken, Van Der Film, Translation of Munir and Fasheh, p. 7). Beirut: Nissan.
- Fayeqih, H. (2002). Evaluation of Electronic information Reference available on Internet and CD-ROMs. Journal of Modern Trends in Library and Information Science, 18.
- Fityha, M. (1995). *Measurement approaches and methods of evaluation: Tests and Examinations designing and Results processing* (p. 198). Casablanca: Didaketiya.
- Guendhilji, A. (1999). Research and Dealing with Computerized Information Sources. *Arab Journal of Information*, 20(1), 31-32.
- Guendhilji, A. (2000). Sources of information: From Manuscripts Era to Internet Time (p. 345). Amman: Dar AlFiker.
- Hashim, M. (2006). *Methodology and standards of evaluation of sites on the World Wide Web*. "Web" Acts of the Ninth Conference of the Arab Federation for Libraries and Information.
- Hijjawi, H. (2000). The scientific method in evaluating the databases from the point of view of the libraries. *Arab Journal of Information*, 3(1).
- Lancaster, W. (2000). Library and information services: Their Measurement and Evaluation (p. 735). Riyadh: King AbdelAziz Public Library.



- Muntaha, T. (2004). Libraries Approaches on the Internet: Analytical Study. *Journal of King Fahd National Library*, 112(55).
- Rehab, Y. (2015). Evaluation of the sites of digital libraries on the gates of Egyptian universities: A comparative analytical study. Retrieved from https://www.researchgate.net/publication/280599404_tqyym_mwaq_almktbat alrqmyt ly bwabat aljamat almsryt drast thlylyt mqarnt
- Sabbagh, I. (1999). Future of Technology in Digital Video Disks, Storage, and Retrieval of Information. *Arab Journal of Information*, 20(2), 64.
- Shaheen, S. (1999). Construction and development of library holdings of Contents computerized information: scientific review. *Arab Journal of Information*, *2*, 26.
- Shaheen, S. (1999). Electronic Serial Business. Arab Journal of Information, 20(2), 30.
- Shalhoub, C. (2000). Establishing electronic library in Beirut. *Computer, Communications and Electronics, 17*(5), 51.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).

