

Criteria for Evaluating the Performance of Arabic Digital Libraries

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Abstract—The research try to identify the reality and determine the criteria of evaluating the performance of Arabic digital libraries through analytical descriptive and shed light on the future of the storage and retrieval of information and make it available. In this paper the result showed the possibility of giving general information about each one of the digital libraries, also the results showed the possibility of sailing through the site to obtain the information required for research.

Index Terms—Digital libraries, digital libraries-criteria.

I. INTRODUCTION

The digital libraries are institutions of information and systems having many databases which containing various types of sources of digital information & electronic form therefore they are developed comprehensive retrieval systems deal with brilliantly digital data via multimedia in order to support the beneficiary in the dealings with the information available on the networks [1] The digital libraries in the Arab word made a significant progress in this fields like;-(*Alexandria digital library*), which was started in September 2009 with supporting of UNESCO containing more than 30 institutions [2], (*the library of Cairo university*) which was started in 1932 covering a thousand of printed books ,manuscripts and periodicals. On the 29 February 2008 it started as a digital one which has a large collection of rare books and manuscripts in the Arab word and an electronic archive of thesis and dissertations [3] (*The national library of King FAHD in the KSA*) this library begins as a digital library in 1406H .it contains more than (367.000) of the different kinds of materials such as, rare books and manuscripts. And also includes about (5000) wrapped illustrated Arabic manuscripts in psychology which was bringing from the university of Preston, in USA. It was currently comprises (100.000) materials which is related to the kingdom. And last [4] (*the national library in IRAQ, which is name also the house of books and documents*).it was established in 1920 .the library provides many services like, issues national bibliography of IRAQ and monthly electronic bulletin beside that, the national archive is available on the internet and online catalog [5],, so the research seeks to achieve the following objectives:

1) Identify the reality of Arabic digital libraries include:

- Bibliotheca of Alexandrina in Egypt

- The library in Cairo
- The national library of King Fahd in Riyadh
- The national library of IRAQ

Determine the criteria to evaluate the performance of the Arabic digital libraries in term of questions and answers.

II. MATERIALS AND METHODS

The deceptive analytical method was used to evaluate the performance of Arabic digital libraries in Alexandria, Cairi, Riyadh and Baghdad, each library was identified by symbols as follow:

- Alexandria represented by (A)
- The new library in Cairo represented by (C)
- National library of king Fahd represented by (F)
- National library in IRAQ represented by (I)

The research depending on the internet as a source of digital information gets most of the information in highlight of the great development of technology in the modern era. Some of the important criteria ranged from 1-16 used to evaluate the performance, modernity ,intellectual liability, accuracy, general information, shape&design, access, link to the site, subject, continuity, security, recognition and supporting.

III. RESULT AND DISCUSSION

Table I and Table II indicates criteria of precision and intellectual liability showing the possibility of contact on signing the document as it was between degree good&v. good in the each of the libraries except in the national library of Iraq which was weak, also the table indicate that the type of institutions were academic and national, that mean all the sites of the libraries serve specific kind of users.

TABLE I: ILLUSTRATE THE INTELLECTUAL LIABILITY

criteria	intellectual liability			
Questions	Libraries			
	A	C	F	I
Is it a publisher or author	academic	University library	national	national
Type of institution	academic	academic	national	national
Access publisher or author	yes	yes	yes	yes

The Table III and Table IV show that all the information which provide by all the libraries are not limited, also indicate that digital library of king Fahd has always try to help the users by providing an update information.

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TABLE II: INDICATE THE CRITERIA OF PRECISION

criteria	precision			
Questions	Libraries			
	A	C	F	I
The possibility to contact this document	<i>v. good</i>	<i>good</i>	<i>good</i>	<i>weak</i>
The objective of the preparation of the document	<i>clear</i>	<i>clear</i>	<i>good</i>	important

TABLE III: ILLUSTRATE THE SUBSTANTIVE

criteria	substantive			
Questions	Libraries			
	A	C	F	I
Holistic topics	<i>medium</i>	<i>good</i>	<i>good</i>	<i>medium</i>
Limited information	<i>no</i>	<i>no</i>	<i>no</i>	<i>no</i>
The possibility to comment on the topics	<i>yes</i>	<i>yes</i>	<i>no</i>	<i>no</i>

TABLE IV: ILLUSTRATE THE MODERNITY

criteria	modernity			
Questions	Libraries			
	A	C	F	I
Who wrote the documents	<i>unclear</i>	<i>unclear</i>	<i>month</i>	<i>unclear</i>
The last update	2010/12/1	2011/10/1	/9/21 2011	/12/1 2010
Is there anewness of links	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>no</i>

Table V and Table VI illustrate that the coverage of the sites of all the digital libraries was completed&comprehensive except the national library of Iraq, the table also show that all the digital libraries using public information usually located in the main interface to work like a guide to the different information such as: catalog, electronic library, manuscript, magazine, library services, rare collection and so on.

TABLE V: ILLUSTRATE CRITERIA OF COVERAGE

criteria	coverage			
Questions	Libraries			
	A	C	F	I
Is the coverage comprehensive&completed	<i>yes</i>	<i>yes</i>	<i>yes</i>	somewhat
Can we trust of the information	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Is there is a table of reference	<i>yes</i>	<i>yes</i>	<i>yes</i>	sometimes

Table VII and Table VIII illustrate that all information which provided by the digital libraries are general and comprehensive beside that all of them have a good design but in spite of that , there are unclear of direct linking to the

information.

TABLE VI: ILLUSTRATE THE GENERAL INFORMATION

criteria	General information			
Questions	Libraries			
	A	C	F	I
What is the type of the campus(governm ent-academy-commercial)	academy	academy	Academy/ government	Academy/ national
it is display graphics with text	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
What is around the site	Complete \$comprehen sive information	General&co mprehensive information	General&co mprehensive information	General&co mprehensive information

TABLE VII: ILLUSTRATE THE DESIGN

criteria	Design			
Questions	Libraries			
	A	C	F	I
Is the shape and design of the site improves the ways of communicating information	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Is the design was a new	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
does the design includes content	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Dose the design organize in easily way	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Dose the design helps to navigate through other s	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>

TABLE VIII: ILLUSTRATE NAVIGATION

criteria	Navigation			
Questions	Libraries			
	A	C	F	I
It is easily of navigation on the sites	sometimes	<i>yes</i>	<i>yes</i>	sometimes
is the main page contains a list of contents	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Is there any direct abbreviations to the content	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
is there any links from all sections of sites	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Is there any direct links to reach to the information in clear way	unclear	unclear	unclear	unclear

Table X and Table IX show that the access to information in an easy&faster way is clear in the library of Alexandria¢ral library in Cairo, but it was sometimes slow in the library of king Fahd&national library of IRAQ. Also the table illustrate that most of the digital libraries are having trouble in downloading fees for substantive content.

Table XI and Table XII show that these libraries have been established after a planned strategy but the possibility of updating information ranging between each week or month, also show that most of the digital libraries allow to give a hard copy through downloading from internet directly, and that reflect the increase of using the site by users.

TABLE IX: THE PERFORMANCE

criteria	Performance			
Questions	Libraries			
	A	C	F	I
Is the load in an expeditious way	yes	yes	yes	sometimes
Does the site produces the option of reading a text-only content is	no	no	no	no
Is the text was clear without graphic	yes	yes	yes	yes
is the load of graphics are rapidly	no	no	no	yes

TABLE X: ILLUSTRATE THE SUBJECT OF THE SEARCH

Criteria	Subject of the search			
Questions	Libraries			
	A	C	F	I
Is the content relevant and has a relevant,	yes	yes	yes	yes
Is the content unique and not available elsewhere	yes	yes	yes	yes
Is the content has the possibility of direct interaction with the users	yes	yes	yes	yes
Is the content meets your request	Sometimes	yes	yes	sometimes

TABLE XI: ILLUSTRATE THE CONTINUITY

Questions	Continuity			
	Libraries			
	A	C	F	I
Can I continue to search in this position	yes	yes	yes	yes
What is the period of validity of the survival of the information in this position	week	week	2week	month

TABLE XII: ILLUSTRATE COMPARISON

criteria	Comparison			
Questions	Libraries			
	A	C	F	I
It is impossible to get a copy of any document from internet	yes	yes	yes	sometimes
Is the information are partial or complete	complete	complete	complete	complete
Is there any necessary to make an comparative to the data and statistics	no	no	no	sometimes

Table XIII and Table XIV [14] illustrate that all the digital libraries doesn't have an encryption system so this lead to make an easy access to the site.

TABLE XIII: ILLUSTRATE THE SECURITY

criteria	Security			
Questions	Libraries			
	A	C	F	I
Is there a special encryption system both	no	no	no	no
Dose the information needed to the encryption system during sending	no	no	no	no

TABLE XIV: ILLUSTRATE ACCESS TO THE SITE

criteria	Access			
Questions	Libraries			
	A	C	F	I
Is it easily to access to the site	yes	yes	yes	yes
Is the process of using the site clear and understandable	yes	yes	yes	yes

Table XV and Table XVI illustrate that the typical design distinguishes the status of the library directly&all the sites are not innovation in, addition to this, the use of sites are easy way but the users couldn't use the smart search because it wasn't found.

TABLE XV: THE RECOGNITION

criteria	recognition			
Questions	Libraries			
	A	C	F	I
Is the design of the site typical	yes	yes	yes	yes
Is the site with an innovative design	no	no	no	no
Is the design of the site with my depending on other sites	no	yes	no	no

TABLE XVI: ILLUSTRATE THE SUPPORT

criteria	supporting			
Questions	Libraries			
	A	C	F	I
Does the site include any documenting to the information to various sources	yes	yes	yes	yes
Are Supported woes include in the search for the possibility of reference	no	no	no	no

Many studies previously have been studied the digital&electronic libraries trying to design as its web to these library by using database management system and gafa language also these studies identify the problems which face the design, most of these studied conclude that the complements of the digital libraries&virtual libraries are the same [6]-[11].

IV. CONCLUSION

In spite of the positive result, there are some negative point like That most of the digital libraries Arab faces the problem of security of access to information where, some of them doesn't having encryption system of its own, as most of them need to be closer to sources of access to information and lacks of strategy (smart search (that lead to have insufficient information and incomplete benefits from the sites.

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