

Роль Интернета в развитии информационных услуг библиотек частных университетов в Иордании

Role of Internet in Development of Information Services of Private University Libraries in Jordan

Роль Інтернету в розвитку інформаційних сервісів бібліотек приватних університетів в Йорданії

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В настоящем докладе особое внимание уделяется роли Интернета в развитии информационных услуг в библиотеках при университетах Иордании. При сборе данных был использован описательно-аналитический метод. В работе сделан вывод о том, что существует значительная взаимосвязь между доступностью Интернет-сервисов и развитием информации в библиотеках университетов. Дана важная рекомендация – проводить обучение сотрудников библиотек по продвижению библиотечных услуг.

Ключевые слова: Интернет, информационные услуги, библиотека, университетская библиотека.

This study aims to highlight the role of Internet in the development of information services in Jordanian universities' libraries. Descriptive-analytical approach was used to collect data. The study concluded that there is significant relationship between the availability of the Internet service and the development of information in universities' libraries. Important recommendation was conducting training courses for employees working in libraries to promote the library services.

Key words: Internet, information services, library, university library.

В цій доповіді особлива увага приділяється ролі Інтернету в розвитку інформаційних послуг в бібліотеках при університетах Йорданії. При збиранні даних було використано описово-аналітичний метод. В роботі зроблено висновок про те, що існує значний взаємозв'язок між доступністю інтернет-сервісів і розвитку інформації в бібліотеках університетів. Подана важлива рекомендація – здійснювати навчання працівників бібліотек з просування бібліотечних послуг.

Ключові слова: Інтернет, інформаційні послуги, бібліотека, університетська бібліотека.

The libraries are still a monument cited in all fields and due to the nature of the relationship between library science with other sciences. It is considered as the most important place that contains the information and sources of information related to those sciences. With the passage of time and the evolution of the means of receiving direct and indirect information and the emergence of new technologies such as computers and the Internet (World Wide Web), in addition to database and memberships in the periodic information resources. The importance of libraries as a reference and center for maintaining and retriev-

ing information resources for other sciences has diminished. Which in turn led to a lack of frequenting the library by many of the beneficiaries and visitors, but at the same time, with the advent of new technologies which participated in the development of many areas of science, including library sciences, it became possible to use much of the library services online through library subscription in various databases and various sources of electronic information, which helped in a quantum leap in a number of factors of importance to the users including time, effort, and money.

The societies evolve with the development of sciences. Library sciences are developed where the development of the society is evolving, in terms of its administration, services, and its information resources, in addition to the staff that work in this area. Library science does not only depend on specialists in the field of library science, since it has mated with programmers, data entry and systems analysts. In addition to the use of other sciences such as indexing and extraction. One of the types of libraries covered by this study is the academic libraries, which include university libraries, college libraries, and institutes, which are considered the oldest types of libraries.

The problem of the study

With advances in Internet services, researchers have noticed a discrepancy in the level of Internet use in the provision of various information, due to their important role in raising the level of services provided to beneficiaries. Thus the problem of this study lies around identifying the most important obstacles facing the private university libraries in providing information services through the Internet, from the perspective of employees. In addition to identifying future scenarios available to overcome the problems facing the development of its services through the use of the Internet.

The importance of the study

The importance of the study lies around identifying the importance and the role of the internet in the development of information services in libraries in general and private university libraries in particular, where the importance of this study stems from reaching to the key benefit of Internet use in libraries, in order to promote the library service to the required level.

The objectives of the study

This study aims to:

1. Identifying the most important means that libraries must follow in order to develop its services on the Internet.
2. Identifying the problems and difficulties facing the private university libraries in terms of accessing its services on the Internet.
3. Knowing the correlation between the libraries and the Internet through recognizing the benefits provided by the Internet for libraries to promote their services.

Study hypotheses

H01: There is no statistically significant relationship ($\alpha < 0.05$) between the availability of the Internet service and the development of library services in the private Jordanian universities.

H02: There are no statistically significant relationship ($\alpha < 0.05$) between the workers knowledge of the use of information technology and the development of library services.

Boundaries of the study

Spatial boundaries: This study was limited to private Jordanian university libraries, namely: Isra University, Philadelphia University, Al Ahliyya Amman University, Applied Science University, Irbid National University, and Al-Zaytoonah University of Jordan

Temporal boundaries: the academic year 2011/2012

Terms of study:

The internet:

A network that consists of a large numbers of networks linking computers distributed around the globe, via satellite, telephone lines, or fiber-optic networks (Hatamleh, 2006).

Information networks:

Connecting of a number of computers and databases with each other for the purpose of using it by the beneficiaries (Qandelji & Al Samerae, 2000).

University library

A set of libraries that are created, funded and managed by the University, to provide information services to the academic community that is composed of students, faculties, and staff, in addition to the local community (Aleyan & Najdawi, 2000).

Information services

The final result obtained by the beneficiaries in the form of information which comes as a result of the interaction between what is available to the information devices from materials, and human recourses as well as the implementation of some of the processes and technical procedures. Information services depend on the activity of the beneficiaries and their needs of information (Qasem, 1984).

Library services

All types of facilities offered by the library to use books and dissemination of information (Sharf Al Deen, 1984).

Previous studies:

1. In a study by (Mahmud, 2012) entitled, **The internet and information services at health group libraries in Baghdad**, this study reviewed the types of information services provided over the Internet and their role in strengthening the role of the library, supporting scientific research. The study also focused on the most important services provided in medical libraries. The study used survey method to identify the reality of libraries through the sample study's four medical libraries, where data were collected through interviews as well as electronic communication with the staff involved in providing the service. The study pointed out the obstacles facing the development and provision of these services, including the small number of specialists and lack of computers linked to the Internet, where the study provided some solutions and proposals that will support these services and libraries to perform its developmental role in the society.

2. In a study by (Ghareeb, 2006) entitled, **Library cites on the internet: a comparative study for some Arabic and Foreign websites**, the purpose of this study was to verify that the university libraries of selected sites on the Internet meet professional standards through the comparison between these sites in order to know the status of existing sites. The study also verified and explored the sites of the Arab and Western universities in order to compare them and identify similarities and differences. The study also aimed at helping university libraries in the development of the design and content of its sites and ways to improve access and enhance services provided through its pages on the Internet.

3. Another study conducted by (Suleiman, 2005) entitled, **Employing the Internet in university libraries in Jordan**, the purpose of this study was to know the reality of Internet use by the staff in the management of technical operations in the libraries of public universities in Jordan. The results of this study indicated that the public university libraries provides the internet infrastructure, in addition, the staff working in these libraries mostly have the equipments and supplies for the use of the Internet in the management of technical operations and performing activities, and have the ability to deal with the Internet. A weakness was identified in the employment of the internet use by the staff in managing technical activities in libraries. This weakness is a result of not sending staff to training courses about the use of the Internet to perform technical operations.

4. In a study conducted by (Aref & Al Uryni, 2002) entitled, **The public internet library, a raw model for digital libraries: an analytical study for its goals, functions, and services**, the study aimed to define the concept of the Internet and library goals and services that can make. The most important findings of the study were:

- The exploitation of the Internet in libraries in building the digital library provides the ability to provide effective reference services, and the possibility of using government information sources and archives available on the Internet in a better and more efficient manner than in traditional libraries.

- The possibility of using digital library projects in the training of students, librarians and information specialists.
- And finally enhancing the performance in the provision of library services through digital libraries and the Internet.

5. In a study conducted by (Al-Maleki, 2001) entitled, **Internet and areas of use in libraries and information centers**, the research illustrated the importance of using the Internet in different types of libraries, such as university, public and school libraries. In addition it demonstrated the different areas for using and benefiting from the internet in libraries and information centers, through e-mail and access to international library catalogs, and subscribing to periodicals and other means such as library cooperation, marketing, learning and education. Furthermore the research showed the problems that may be encountered by these libraries as a result of their linkage to the internet.

6. In a study by (Seadle, 2011) entitled, **Library Hi Tech at 30**, this study aimed at looking at the last 30 years of Library Hi Tech to identify which topics have continued and what priorities have changed. The methodology was a review in which the author looked back at articles from each of the past decades to discuss how they represented core topics for the journal. When Library Hi Tech first appeared 30 years ago, the key topics involved how to make our work as librarians more efficient. Today the question has become: how do we make it easier for those using our resources?

7. In a study by (Baro & Asaba, 2010) entitled, **Internet connectivity in university libraries in Nigeria: the present state**, this study aimed to investigate the availability of internet connectivity in university libraries in Nigeria, and to bring to limelight their readiness to render quality services and communicate with the rest of the world. The study covered the 104 universities in Nigeria made up of federal, state, and private universities. The study revealed that despite the laudable directives from the National University Commission (NUC), many university libraries in Nigeria are still operating without internet connectivity.

Theoretical framework

First: The library

The library is defined as a scientific, cultural, educational, and social institution that aims to bring together sources of information and develop them in different ways. In addition to organizing, and retrieving them in the shortest time possible. Furthermore presenting them to beneficiaries in different forms, through a range of services (traditional and computerized), by means of scientifically and technically qualified manpower in the field of libraries and information (Aleyan & Najdawi, 2004).

University library has three main functions derived from the objectives of the university including: education, scientific research, and community service, in addition to providing the necessary staff of various majors. Since the University contains several departments serving the various objectives of the university. There is no department in the university more closely associated with academic and research programs than the library. The library is not just a store for books, periodicals and information, but is a dynamic and effective tool for education, and culture (Aleyan & Najdawi, 2004).

The university library can set its goals through performing the following functions:

1. Provide a wide range of different sources of modern information and programs that support academic and scientific research.
2. Organizing various sources of information through the services of technical information.
3. Training the workers in the field of libraries and informatics to raise their performance in the specialty.
4. Providing information services that are consistent with the scientific and technological developments.
5. Conducting programs to train the beneficiaries on how to use information sources provided by libraries and information centers.
6. Establishing cooperative relationships with libraries and information centers (Hamshary, 2008).

Second: The basic components to provide the library services in the University Libraries:

In order for university libraries to be able to offer its services in an effective way, a number of key requirements necessary for all types of libraries must be available, including:

1. Different sources of information in terms of form and content.

2. Qualified and trained staff that is able to do the work.
3. Provide necessary facilities for the community served by the library.
4. Provide a sufficient budget to cover work requirements.
5. A successful, influential and effective administration, in the field of work (Al-Nawaysa, 2002).

Third, the Internet (Origin and definition):

The beginning of the emergence of the Internet was in the sixties of the last century, it started as a project funded and sponsored by the U.S. Department of Defense, where it was called (ARPANET). The main purpose of building this network at the time was to be used for military purposes for transferring military information. Furthermore it was used as a network for research purposes by the U.S. space agency (NASA) and a group of scientists and researchers for the purposes of sending and receiving different types of files and messages.

In 1994 occurred the so-called the internet revolution, the general public started to use it for various purposes such as, searching for information, e-commerce and communication. It was because (Tim Berners Lee) who invented the (World Wide Web). This network is a giant Knowledge base that enables subscribers to access to information on any topic from anywhere and at any time, in different forms, either text, voice, or in the form of pictures, and this network is composed of a large group of subnets that connect millions of computers around the globe together, by satellite or telephone lines or fiber-optic networks (Al-Nawaysa, 2002; McNurlin, McBride, & Sprague, 2006).

Fourth: The Internet in Jordan:

Year after the beginning of the spread of the Internet globally, Jordan began using the Internet, and in 1996 the internet service was available to all citizens through Global One company.

One of the first websites built in Jordan was owned by the Jordanian government, named (ask the government). The website was interested in answering questions of different people; these services were provided by a number of specialists in this field. In 1997, three private companies providing Internet service were allowed to operate in Jordan, in addition to Global One. This led to raise the level of service and increase numbers of subscribers, where the number of subscribers jumped from (7350) participants at the end of 1997 to (14000) subscribers at the end of 1998 (Al-Huseiny,1999)

Fifth: The benefits of the Internet to the library:

With scientific and technological developments around the world, the internet has become a must for all sciences including libraries and information institutions, where the benefits of the Internet are:

1. It allows accessing and searching directly in the library catalogs of local, regional and global libraries.
2. Providing access to specialized journals in electronic form.
3. Facilitate the possibilities of cooperation between libraries efficiently and effectively and overcome the spatial dimension, in various fields such as data transmission and the possibility of mutual lending and document delivery services and access to the library contents.
4. Provide e-mail service, providing the opportunity to address and to inquire and obtain information and request sources of information among libraries, institutions and publishing houses as well as local, regional and global databases.
5. Provide other services through the internet such as Selective Dissemination of Information, Retrospective Search, and bibliographic services, in addition to Discussion Groups, electronic meetings, and Teleconferencing (Suleiman, 2005).

Sixth, information services through the library website:

Information services can be divided into two types, namely:

1. Information services on the Internet:

Services provided by the Internet which encourages the beneficiaries and researchers to use this network, such as e-mail service, information search service, obtaining free programs service, news services, and dialogue and conversation services.

2. Library information services through the Internet:

Services provided by the library to users through its Web site without the need for being present in the library. The internet removed the spatial and temporal barriers between the library and its users for the purposes of accessing various services.

Since the advent of the Internet, institutions and organizations including libraries, worked on establishing their own websites. At the beginning the mission of these websites was limited in providing general information about the libraries and their services. With the passage of time these websites turned into interactive tools with the community of beneficiaries to provide various information to them as if they were present inside the library.

Providing information services through the library website on the Internet has many benefits including:

1. Reducing distances and the abolition of the spatial and temporal barriers with the beneficiaries.
2. The commitment of the library or information center to provide excellent information services to the beneficiaries.
3. Reducing operating costs and the effort by those working in the library.
4. Employing modern technology and its applications in the field of providing information services.
5. Increasing the level of information services provided to beneficiaries.
6. Providing valuable information in the form and content.
7. The emergence of new technology based ways and means of communication and dialogue between the beneficiary and library and information specialist (Al-Hallag & Sameer, 2001).

Eighth: the positive and negative repercussions of the Internet:

We can summarize the positive effects of the internet on enhancing the services provided to beneficiaries through library websites by:

1. Provide all information to beneficiaries from external sources.
2. The availability of website for easy access to library information and various services offered by the library.
3. Easy Search in bibliographic databases on the Internet.
4. Download various files from these sites on a personal computer.
5. Provide various interactive services.

Despite the many positives for obtaining of various information through the Internet, it has some disadvantages that must be mentioned, including:

1. The difficulty of making sure of the authenticity and accuracy of the information it contains.
2. Issues related to information security.
3. Diversity of information resources on the Internet often does not meet the needs of everybody.
4. The need in many cases to the specialized search tools to get some information sources (Abdel Lateef, 1998; Muammar, 2008).

Methodology

Study population and sample:

The study population is comprised of 20 Jordanian private university libraries. The study was conducted on a sample of six university libraries; the sampling unit consisted of the staff working in these libraries. 120 questionnaires were distributed, by 20 questionnaires on every library, 81 questioners were recovered, and the recovery rate amounted to 68% of the total questionnaires distributed. Table (1) shows the characteristics of the study sample surveyed.

Table (1) Description of study sample

Variable	Category	Repetition	Percentage
Gender	Male	48	%59.3
	Female	33	%40.7
Age Category	Less than 25 Years	39	%47.6
	26-34 years	35	%44
	36-55 years	6	%7.3
	More than 45 years	1	%1
Education	Secondary education	7	%8.9
	Diploma	26	%31.9
	Bachelors	32	%39.6
	Graduate studies	16	%19.4

Table (1) shows that males account for the most of the sample collected (59.3%). As for the age category, the sample collected was concentrated in the age group of (less than 25 years old) and the age group of (26-34 years) by (47.69%) and (44%) respectively. As for the education it is evident that most of the sample collected was in the category of bachelor's degree by (39.6%).

Data collection methods:

It was relied on several sources in order to obtain data and information needed for the study including:

1. - Secondary sources: a literature review was conducted on the themes related to the Internet and information services in libraries through books, periodicals, articles and previous studies.

2.- Primary sources: in order to meet the purposes of the present study and to collect field data necessary, a questionnaire has been designed based on the review of the literature study and the study hypotheses. After presenting the questionnaire to a group of specialists in the field of library science and information systems, it consisted in its final form of three parts. The first part measures the characteristics of the study sample, the second part measures the dimensions of Internet use from the standpoint of workers, and the third part measures the dimensions of the development of information services.

The reliability of the instrument of the study has been proven using the statistical parameter Alpha Cronbach which amounted to (82.5%) for the variable of the Internet use, and (76.6%) for the variable of the development of information services. these values are greater than the percentage accepted statistically of (60%) (Sekaran, 1992), which means that the scale has acceptable significance of stability, and confirms the possibility of obtaining the same results on another sample under the conditions of the study.

Data analysis methods:

For the purposes of study hypotheses testing researchers used statistical methods represented by:

First: frequencies and percentages to describe the study sample.

Second: Pearson correlation analysis to test the hypotheses of the study related to measuring the role of the Internet in the development of information services in the private university libraries in Jordan.

Statistical Analysis and Hypotheses testing

First Hypothesis:

H01: There is no statistically significant relationship ($\alpha < 0.05$) between the availability of the Internet service and the development of library services in the private Jordanian universities.

To test the first hypothesis Pearson correlation test was used to determine if there was a significant relationship between the availability of Internet service and the development of library services in the Jordanian private universities, at the level of statistical significance ($\alpha < 0.05$), as indicated in table (2).

Table (2) Pearson correlation between availability of the Internet service and the development of library services

R	The significance level
0.732	00.00

The significance level was (0.000) which is less than the specified value (0.05), suggesting the existence of a significant relationship between the availability of Internet service and the development of library services in the Jordanian private universities, therefore we reject the null hypothesis and accept the alternative hypothesis.

Second Hypothesis:

H02: There is no statistically significant relationship ($\alpha < 0.05$) between the workers knowledge of the use of information technology and the development of library services.

To test the second hypothesis the Pearson correlation test was used to determine whether there was a significant relationship between the knowledge of workers use of information technology and the development of library services, at the level of statistical significance ($\alpha < 0.05$), as indicated in table (3).

Table (3) Pearson correlation between workers knowledge of the use of information technology and the development of library services

R	The significance level
0.773	00.00

The significance level was (0.000) which is less than the specified value (0.05), suggesting the existence of a significant relationship between the knowledge of workers use of information technology and the development of library services, and therefore we reject the null hypothesis and accept the alternative hypothesis.

Results:

1. The internet infrastructure is available in the private university libraries, and the staff working in these libraries mostly has the equipments and supplies for the use of the Internet in the management of library services and the completion of activities, and has the ability to deal with the Internet.

There is weakness in the employment of the internet by the staff in the management of **library** services in these libraries, due to not dispatching the staff in training courses in the field of Internet use in the technical operations, despite the conviction among the workers that there is great importance of using the Internet in completing various library services.

2. There is a statistically significant relationship between the availability of the Internet service and the development of library services in the private Jordanian universities

3. There is a statistically significant relationship between the workers knowledge of the use of information technology and the development of library services.

Recommendations

1. The need to hold courses and training workshops for workers in the private university libraries, in the field of the toptimal use of the Internet in the management of technical operations, in order to improve the efficiency and effectiveness of workers, to achieve the maximum benefit from the use of the Internet.

2. The ongoing development of the infrastructure and equipments used, and increasing the speed of the Internet to keep up with scientific and technological developments.

3. Establish effective cooperation between the libraries to exploit the internet and its enormous capabilities to employ them in the management of technical operations in the university libraries, through information networks. Linking the libraries to each other such as the establishment of the consortium among private university libraries. In addition to standardization of information systems, and relying on the modern library systems such as the (integrated library system) which enables the private libraries to effectively cooperate between them to gain access to unified index and joint supply, as it is the case in the public universities libraries.

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