

**DELIVERING ELECTRONIC  
RESOURCES AT TWO ACADEMIC  
LIBRARIES IN RIYADH**

**BY**

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## ***ABSTRACT***

This study addresses approaches and methods used in the delivery of electronic resources in two academic libraries in the Kingdom of Saudi Arabia, the Central Library of the Imam Muhammad bin Saud Islamic University, and the Central Library of the King Saud University (now known as Prince Salman Central Library). The study also attempts to discover the impact generated by the current methods in the delivery of electronic resources through examined libraries' websites. The study hypothesizes that the current methods in the delivery of electronic resources through the websites of the studied libraries can be anticipated to have a negative effect on the rate of the effective use of electronic resources.

The research used the survey methodology to describe the phenomena and to obtain information. The sample for this research was purposive sampling of academic staff at the Library and Information Science departments in both universities. The researcher distributed 50 questionnaires, and received 42 usable responses. In addition, the study presents the techniques and methods used in the libraries studied.

The study findings were that the examined libraries use primitive methods in the delivery of electronic resources through their websites, and they depend for the delivery of electronic resources on the library system providers or on the aggregators or vendors of the electronic resources. In addition, there is a lack of experience among the libraries' staff in dealing with electronic resources.

In terms of the impact of the delivering electronic resource services, the research found that more than a quarter of respondents do not use the electronic resources provided by the studied libraries. In addition, the majority of respondents (78.6%) use electronic resources which are provided by other institutions or universities. However, the knowledge of the respondents about the types of electronic resources provided by the libraries was also investigated. The majority of respondents did not know that their libraries provide electronic journals, with only 19% of respondents stating that the library provides electronic journal.

The study affirmed that there was dissatisfaction among the respondents about the methods adopted in delivering electronic resources through the internet by the examined libraries.

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## ***LIST OF ABBREVIATIONS***

AAS	Arabian Advanced Systems <sup>TM</sup>
DOI	Digital Object Identifier
EIS	Electronic Information Service
EJs	Electronic Journals
ERG	Electronic Resources Gateway
ERM	Electronic Resources Management
IMBSIU	Imam Muhammad Bin Saud Islamic University
KACSTL	King Abdulaziz City for Science and Technology Library
KFCRIS	King Faisal Centre for Research and Islamic Studies
KFMCL	King Fahad Medical City Library
KFNL	King Fahad National Library
KSU	King Saud University
LIS	Library and Information Science
PSCL	Prince Salman Central Library

# ***CHAPTER I***

## ***INTRODUCTION***

Nowadays, many libraries and information centres are showing an interest in the development of their collection by electronic resources. Electronic resources offer users many facilities that traditional resources (print-based formats) were not able to provide. Electronic resources do not occupy a great deal of physical storage space, and can be accessed remotely. Compared to traditional resources, electronic resources have several advantages, such as rapid delivery, being easy to browse, and having a short production and distribution cycle. Therefore, electronic resources have gained widespread usage in the library community, and this has led to the development of libraries' collections by electronic resources. Jewell, T. D. (2001) states that "over the last decade, libraries of all kinds have been spending larger and larger shares of their budgets to acquire or gain access to electronic resources from publishers and vendors" (Jewell, T. D. 2001. p1)

The purpose of academic libraries is to provide information resources which meet their users' needs; therefore, electronic resources have become a major part of the academic library's collection in the fulfillment of its role of teaching, learning, research, and services to the community. Academic libraries have focused their attention on acquiring electronic resources, organizing them and presenting them to their community.

Most of the academic libraries in the Kingdom of Saudi Arabia (KSA) provide access to electronic resources. The acquisition of electronic resources in the academic libraries of the KSA has drawn the attention of decision-makers and librarians; therefore, most of these academic libraries have expanded their budget to include these new materials. Recently, many of the KSA academic libraries have subscribed to electronic databases, electronic journals, electronic books, and electronic encyclopedias, and they have also purchased many electronic resources on CD-ROMs, and built web-based collections, to make them available via the libraries' websites (Afeah, H. A. A. 2005. Dulaymi, S. T. et al. 2004).

### ***Identification of the Problem***

Many studies have addressed the development of electronic resources in academic libraries in the Arab countries, particularly in the KSA {studies written in Arabic: Afeah, H. A. A. 2005; Alsurihy, H. and Qumsani, N 1997; Alshouish, A. 2002; Hamdi, A. W. 2006; and Shahiyen, K. 1997}; {studies written in English: Al-Baridi, S., and Ahmed, S. S. 2000; Al-Musnad, I. A. 1994; Ashoor, M. S. 2000; Ashoor, M. S., and Kanamugire, A. B. 1996; Chaudhry, A. S., and Ashoor, S. 1994; Dulaymi, S. T. et al. 2004; Kanamugire, A. B. 1994. Kanamugire, A. B. 1996; Qureshy, J. A. 1995; Siddiqui, M. A. 1995; and Zehery, M. H. 1997}.

However, managing electronic resources in the KSA's academic libraries, particularly in terms of organizing, delivering, and presenting electronic resources have not been discussed, apart from some studies mentioning the techniques or standards of the cataloguing of electronic resources. (Shahiyen, K. 1997. Hamdi, A. W. 2006). A browser of Saudi academic libraries' websites will notice that the approach to delivering electronic resources is fairly rudimentary, and rely on some individual efforts that the library has adopted in organizing and delivering electronic resources to the end-users, although delivering and presenting electronic resources is considered to be a key function of the library, especially since the governing trend of the library is access rather than ownership (Ashoor, M. S. 2000). Hence, the researcher found that most of the KSA academic libraries rely on establishing an electronic resources portal or gateway, which includes the titles list of the electronic resources' aggregators in alphabetical order, "Title Index", and in some cases they have added subject headings. However, certain libraries, such as KFUPML, have taken further steps to integrate some titles of their electronic resources collections in their OPACs.

From the above, we can conclude that no specific approaches were taken to delivering electronic resources at the libraries studied.

### ***Existence of the Problem***

The statistics of usage of electronic databases that have been subscribed to by the Central Library of Imam Mohammed Bin Saud Islamic University (IMBSIU), issued by the aggregators and vendors of these databases, such as EBSCO, ProQuest,

Science Direct, and Blackwell was examined. The results of analyzing these statistics proved unsatisfactory to the library's main decision-maker, because the percentage of users availing themselves of these databases was low in proportion to the number of the library's community and the potential users of these electronic resources (Alobied, A. 2006).

In addition, the researcher worked in teacher assistance at the University of Imam Muhammad Bin Saud Islamic University until 2004. At that time the establishment of a website of the IMBSIU library was in its initial stages. This coincided with the participation of a variety of library databases, and access to them through the library's website. There is an opportunity for the researcher to identify the experiences of developed countries such as the UK in providing online search services in databases through academic libraries' websites, particularly that of the library of Strathclyde University in Glasgow, and through the curriculum material, Information Sources, Organization, and services. Having an assignment to evaluate the presentation and delivery of electronic sources to the library's users led the researcher in the direction of some of the problems surrounding this aspect, some of the solutions that have been used, such as the use of open URL (e.g. SFX) as well as integrating electronic resources within the library's OPAC, and, in addition the creation of the electronic gateway, according to resource subject, forms, content, and title. This prompted the researcher to look at the status of the presentation and delivery of electronic resources in the libraries examined. Through his experience and examination of the libraries in question in this area of study, he found that they were simply building gateways of electronic resources. In addition to the lack of solutions to link bibliographic databases with full text databases, and particular that the studied libraries have not acquired print-based formats, which may lead to lack of access to the desirable source. As a result, most proportion of the library community relies on the library of King Abdul Aziz City for Science and Technology, as this library provides a service of request and delivery of documents. The central library of IMBSIU has common set of full text databases, but there is no mechanism for linking bibliographic databases with full text databases. In addition, new electronic resources and their trial periods were usually publicized by brochures in the library building, therefore, from this situation stemmed the idea to study this issue.

### ***The Research Hypothesis***

This research assumes that there is an exponential relationship between the level of delivery of electronic resources to end-users, and the improvement in the use of these electronic resources by the end-users, through the library website. A standardized scientific approach to the delivery of electronic resources, therefore, will lead to an improvement in the use of electronic resources and more considerable investment in them by the end-users. This research attempts to reveal the extent of the impact of the delivery of electronic resources on the rate of use of such resources by the users in the libraries under consideration.

### ***Research Objectives***

This research seeks to achieve a set of goals which could serve to contribute to both the theory and practice of managing and organizing electronic resources in academic libraries, particularly in Arabic libraries which seek to deliver electronic resources through their websites. The researcher has developed a set of objectives to be pursued, which are as follows:

1. Identification of methods in academic libraries at global level, in the area of administration and management of electronic sources.
2. Identification of patterns and methods of delivery of electronic sources in the academic libraries studied.
3. Identification of strengths and weaknesses in the method of delivery of electronic resources in the libraries in question.
4. Verification of the existence of a relationship between the level of delivery of electronic resources and the rate of use of these resources in those libraries which form the focus of the study.

### ***Significance of the Research***

The importance of research lies in its attempt to evaluate in-depth the scientific methods of delivering electronic information resources, which have been acquired or subscribed to by the libraries studied, from the viewpoint of the recipient of these resources. In addition, this study endeavors to discover the strengths and weaknesses in existing approaches to managing the provision of such resources. This

will allow decision-makers in the libraries concerned the possibility of identifying the standard of the service provided to users of these libraries, and, accordingly, the appropriate decisions which should be taken to improve the electronic services of the library.

### ***Research Questions***

In order to fulfill the research objectives, this study attempts to answer a series of questions. These questions are as follows:

1. What are the current methods and procedures in general use by management in the field of electronic resources in academic libraries?
2. What are the particular methods used by management in the area of electronic library resources in the libraries studied?
3. Are the methods used in libraries to deliver electronic resources considered appropriate, and are they suitable to the requirements of the library community?
4. Are the methods of delivering electronic resources currently used in the libraries studied affecting the utilization rate of those resources?

### ***Delimitation of the Research***

This research has a limited scope; it seeks to address as fully as possible all the issues within this scope, without venturing beyond it. Its boundaries are as follows:

#### ***Subject limits***

1. The research addresses the issue of delivery of electronic sources of the libraries examined as a fundamental issue in the study.
2. The study addresses English electronic resources in particular; the reason for choosing these resources is that over the last ten years the budget of KSA has decreased, and therefore many libraries canceled their subscriptions, whether to electronic databases or electronic journals (Dulaymi, S. T. et al, 2004). From 2001 to the present, however, many of KSA's academic libraries have seen an increase in their budgets, and so they were able to subscribe to English electronic resources. "Many of KSA's academic libraries, such as IMBSIU,

expend a large part of their budget on English electronic resources," (Alobied, A. 2006).

3. The study presents the methods used in delivering electronic library resources in the libraries under consideration in the study.
4. The study attempts to explore the suitability of the methods used to deliver electronic resources in these aforementioned libraries.
5. The study seeks to arrive at a set of recommendations to improve the approaches to delivering the electronic resources provided in the libraries in question.

### ***Geographical limits***

The geographical range of the study is within the city of Riyadh in the Kingdom of Saudi Arabia. It is concerned with the academic libraries; these libraries being the following:

1. The Central Library of the Imam Muhammad bin Saud Islamic University.
2. Prince Salman Central Library PSCL (formerly the Central Library) at the University of King Saud.

### ***Temporal limits***

The research addresses the methods in the presentation and delivery of electronic resources in the months of July and August 2006 in the libraries studied. The Central Library of the Imam Muhammad bin Saud Islamic University has adjusted access to subscribed electronic databases. The presentation of the databases is through the library's website, and there is therefore no need to transfer the recipient to the publisher or aggregator's website on the Internet. This allows users to use one entry number to gain access to electronic resources, and gives the library the possibility of remote access to electronic resources. .

### ***Limitation of the Research***

This research is doubtless deficient in certain aspects, and hence it is necessary to identify these shortcomings, which include:

### ***Substantive aspects of the research***

1. The research does not address the phase of the acquisition of electronic information resources, and the associated assessment of the resources of its electronic library, such as feedback from the users, for example, through their acceptance and usage of a certain resource and the consequent renewal or cancellation of the subscription to it.
2. The research does not address the coverage of electronic resources available on CD - ROMs, or electronic resources locally based in In-house Databases (mounted locally), but rather it focuses on those sources that are participating through vendors, publishers or aggregators, and are available on the Internet, including those which are fee-based (commercial).
3. The research does not address Arabic electronic resources, as the examined libraries have a lack of Arabic electronic resources (Afeah, H. A. A. 2005. p 134). These libraries have subscribed to four Arabic electronic resources (i.e. ASK ZAD, Global Arabic Encyclopedia, Arab Lowers Network "Mohamoon.Net", and Alkhazindar Periodicals Databases), which are available through the internet. Their other Arabic electronic resources are in CD-ROMs and mounted locally.
4. The research does not consider the issue of use as a fundamental key; use is considered rather in its relation to the delivery of electronic resources.
5. The selected sample (purposive sample) may not be fully representative of the characteristics of the studied community, although it has been selected for this category basis of the goal.

### ***Geographical aspects of the research***

1. The researcher cannot cover all the university libraries in the Kingdom of Saudi Arabia.
2. The academic libraries selected for study may not be representative of all the characteristics of all the university libraries in the Kingdom of Saudi Arabia.

### ***Temporal aspects of the research***

1. The short time allotted for the evaluation process and the identification of methods of delivery of electronic sources may not be entirely adequate, but the researcher will attempt to use this time as productively as possible.



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2. The library may have plans for the future development of methods of delivering electronic resources to recipients of which the researcher is unaware, despite contact being made by telephone with the deans of the libraries involved before embarking on the writing of the results.

## ***CHAPTER II***

### ***RESEARCH METHODOLOGY***

The purpose of this research is to describe and investigate the methods used in the studied libraries for the delivery of access to electronic resources, as well as the impact of these methods on the increase or decrease in the use of electronic sources in the libraries. A variety of methods were required to reach conclusions that would serve the purposes of this research, as was a set of tools for the data collection involved.

Since the study relied on description and exploration of the phenomenon, as well as identification of the ways in which access to electronic resources is delivered in the libraries examined.

#### ***The Universities' Libraries to be Examined***

The researcher selected two university libraries to be studied in this research. They are the Central Library of Imam Muhammad bin Saud Islamic University (IMBSIU) and the Central Library of King Saud University (KSU) (now known as Prince Salman Central Library) (PSCL). There are several reasons for the selection of these universities. First, both universities are located within the range of a single city, that is, Riyadh. They are also among the biggest universities in the Kingdom of Saudi Arabia. Secondly, the Higher Education Ministry in the Kingdom of Saudi Arabia has initiated a resource-sharing scheme among academic libraries to establish a consortia project; one of the objectives of this project is the acquisition of electronic resources. The PSCL took the role of organizing acquisitions in the Saudi academic libraries. The IMBSIU central library is one of the academic libraries in this project. Thirdly, both universities have an LIS department, and these departments provided the research population.

#### ***The Research Methodology***

The study adopted a survey methodology to achieve the research aims. Survey methodology does not involve only collecting data and describing phenomena; it goes

further by explaining and discovering relationships between phenomena (Alassaf, S. 2000. p 193). Therefore, the survey methodology uses set of tools and techniques to collect and analyze data. The following tools were used in the research in order to achieve its goals.

**Table (2-1): Tools and Techniques**

Tools & Techniques	Outputs & Outcomes
Literature review in the field of study	To identify the applications used in the delivery of access to electronic resources, and the attendant developments in this area.
A questionnaire aimed at the study sample	To know the extent of the impact of the methods used in the delivery of electronic sources on the utilization rate of those sources.
Examination of the libraries' websites	To identify techniques and methods for delivering electronic resources used in the libraries studied.
Interviews with library staff.	To find out about the working techniques in the libraries studied for delivering access to electronic sources to their community and to identify future plans in this area, if any.

### ***The Sample of the Research***

Electronic resources are provided to the library communities, which include university students, academic staff, and researchers; in addition the university library has played an important part in society in general by providing life-long learning, so the circle of library users is quite wide. For this research, therefore, a sample was selected to carry out the survey. This sample is a purposive sampling, i.e. academic staff in the Library and Information Science departments in both KSU and IMBSIU universities. There were several reasons for selecting purposive sampling rather than using random sampling, systematic sampling, or even cluster sampling:

1. The researcher believes that the sample selected is more aware of the importance of electronic resources.

2. The researcher presumes that members of the selected sample are familiar with the methods used in the organization and delivery of electronic information resources.
3. Some of the members of the selected sample had responsibility for the management of the academic university, such as Dean of the academic library.

Denscombe, M. (2003) states the reason for taking purposive sampling:

"The researcher already knows something about specific people or events and deliberately selects particular ones because they are seen as instances that are likely to produce the most valuable data".  
(Denscombe, M. 2003. p 15).

The selected sample is the academic staff, covering all professional grades: professor, reader, senior lecturer, lecturer and academic-related staff in both departments of Library and Information Science in IMBSIU and KSU.

**Table (2-2): No. of Academic Staff in LIS Depts. Of Each Library**

<b>LIS Department</b>	<b>Number of Academic staff</b>
IMBSIU	15
KSU	41
<b>Total</b>	<b>56</b>

There are fifteen members of academic staff in the LIS department in KSU. The department belongs to the Art Faculty of KSU, and provides an LIS programme which gives Bachelors degrees in LIS, and also provides courses in education. The department is restricted to providing degrees to males.

In the LIS department at IMBSIU there are 41 academic staff members. The department was established in 1974, as part of the Arabic Studies College at IMBSIU. In 1980 – 1981 the department moved to the Social Sciences College in the same university. In 1985 the department established a department for female students in the Female Student Campus. The department aims to graduate qualified professionals in LIS, in addition to information specialists to be employed in the education section as school librarians, or teachers in teaching the Library and Research curriculum.

**Table (2-3): Gender of Academic Staff in LIS Depts. Of Each Library**

<b>Gender</b>	<b>Academic Staff at LIS in IMBSIU</b>	<b>Academic Staff at LIS in KSU</b>	<b>Total</b>
Male	24	15	<b>40</b>
Female	17	0	<b>16</b>
<b>Total</b>	<b>41</b>	<b>15</b>	<b>56</b>

The research sample comprises 56 participants, although five of these (in the LIS department at IMBSIU), were excluded as they were studying abroad, for either Masters or Ph.D degrees. Therefore, had they been questioned as to whether they used the electronic resources which are provided by e-mail in the studied libraries (see Appendix A), their responses would obviously have been that none of them were using the electronic resources in those libraries. Therefore, 51 questionnaires were sent to 51 participants, from an original sample size of 56; this equals 91%.

### *The Questions*

The purpose of this research is also to identify the impact of the approaches to delivering access to electronic resources on the communities of the studied libraries. The study is therefore user-centered, and discovered the impact of the approaches and techniques of delivering access to electronic resources via the websites of the libraries of studied universities. This was carried out by running a survey questionnaire, which attempted to obtain facts and the opinions of the respondents. Denscombe, M. (2003) states that: "The information from questionnaires tends to fall into broad categories – 'facts' and 'opinions'." (Denscombe, M. 2003, p 146).

The questionnaire was prepared in accordance with the evaluated tool kit, which was "designed to support information services staff in Higher Education Institutions with the evaluation of electronic information services (EIS)" (the Evaluated Tool Kit website, 2006). The study made use of the evaluation tools provided by the website for the evaluation of access to Electronic Information Services (EIS) from users' experiences, and the impact of EIS, although making some adjustments to them appropriate to the purposes of the research. In addition, the study benefited greatly in designing the survey questionnaire from the work of Al-Saleh, Y.

(2004) which addressed graduate students' information needs from electronic resources .

The survey questionnaire was divided into five parts:

1. The first part consists of demographics to obtain basic information about the participants, relating to gender, age group, degree, place of work, and when they began using the Internet.
2. The second part is concerned with the usage of the electronic resources which are provided by the university library. This part aims to find out the ratio of using the electronic resources provided by the university library and, in addition, to identify other libraries or institutions that were used by the participants. This can lead to making comparisons between the university library and other sources in the field of study.
3. The third part includes, firstly, finding out how the participants became aware of the kinds of electronic resources which are provided by the universities' libraries. Through this we can measure the impact of the approaches to delivering electronic resources adopted by the respective libraries. Secondly, it seeks to identify the kind of electronic resources used in information seeking. Finally, the participant was asked to choose appropriate methods to publicize and make him or her aware of new electronic resources, upgrading subscriptions, etc. (E-mail, phone, notices on the library's website, sending letters to the department, posters and leaflets in the library building ).
4. The fourth part is divided into two sections; the first one is to discover what barriers exist to the delivery of access to electronic resources through the experience of the participants. The second section asked the participants his or her opinion as to how significant some factors were in having a negative effect on the use of electronic resources delivered through the library's website, from very significant to not significant at all.
5. The fifth and final part is the evaluation of satisfaction and subject comments. The participants were asked to give an evaluation of the delivery of electronic resources via the library website, from very satisfied to very dissatisfied. One open-ended question asked participants to add their comments or suggestions about delivering electronic resources through the libraries' websites.

In addition, the considerations in designing the questionnaire were that it should be clear, accurate, comprehensive, and easy to answer. The researcher tried to keep to close-ended questions as much as possible, except in some cases which required obtaining extra information or suggestions. Furthermore, because the questionnaires were sent via E-mail to the targeted samples, the questionnaire was designed in tables, to be easier to fill in and to navigate, as well as a familiar symbol - a tick (✓) - being selected to enable the respondent to mark the appropriate answer. The questionnaire was peer-reviewed and tested by some respondents. The questionnaire was sent to ten respondents to peer-test it. The number of completed questionnaires was as follows:

**Table (2-4): Response Rate to Questionnaires**

	<b>Number</b>
<b>Questionnaires sent</b>	<b>10</b>
<b>Questionnaires returned</b>	<b>7</b>
<b>Percentage</b>	<b>70%</b>

The questionnaire was modified according to some suggestions made in these returned questionnaires. These modifications involved writing the questionnaire in Arabic, because Arabic is the language of the targeted sample, and the clarification of some terms used in the questionnaire (e.g. delivering electronic resources, electronic resources).

There were prizes for responding to the questionnaire - vouchers from Amazon.co.uk to a total value of £100, the first prize being £50, the second prize £30, and the third prize £20.

### ***Distributing the Questionnaires and Gathering the Responses***

The popular approach of using E-mail addresses for the targeted sample was adopted for delivering and distributing the questionnaires. This was done by visiting the LIS departments' websites in both universities, where there were lists of the academic staff, and their E-mail addresses. In addition, the researcher phoned the LIS departments office to obtain those E-mail addresses which were missing, and to get permission to distribute the questionnaire. Furthermore, the researcher used the

INFOSTUDIES group list, which belongs to the LIS department at IMBSIU to ensure that the questionnaires reached the entire targeted sample.

In addition the researcher phoned the members of the targeted sample to encourage them to fill in the questionnaires, and answering them if they had found any ambiguities or problems in the questions.

The researcher sent a letter of thanks after receiving any response.

The questionnaires were distributed on 3rd July, 2006. The time scale was up to 10th August, 2006.

### ***Review of Literature***

The researcher used the literature review on the subject to identify the methods used to deliver access to electronic information resources in university libraries internationally. Scrutiny of the literature review reveals the barriers to delivering access to electronic resources to users, in addition to the forms of identification used in the provision of electronic resources and experiences in this field, and also identifies solutions and suggestions for the delivery of electronic resources, particularly in the absence of an integrated system to manage electronic resources in libraries. Breeding, (2004) states that: "To date, no single product exists that provides comprehensive management of electronic resources, including both the front-end and back-end functions"<sup>1</sup> (Breeding, M. 2004).

### ***Examining the Libraries' Websites***

To find out the approaches to and methods of delivering access to electronic resources, the researcher conducted examinations of the libraries' websites in order to identify the approaches to presenting, delivering, organizing and advertising these electronic resources via the libraries' websites. In addition, the researcher checked the additional services such as the provision of web-based collections, search engines, subject directories, content – sensitive linking, such as using Open URL, or utilizing DOI, or identifying the content of the databases by using Jake-2- MARC, for instance.

Moreover, the examination gave the researcher broad, first-hand experience in discovering the difficulties and obstacles faced by the libraries' communities in

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<sup>1</sup>The front-end means the content delivery, and the back-end is the acquisition function.



obtaining and utilizing the electronic resources, particularly given the absence of logs of usage files on the examined libraries. These files can give indications as to the use of electronic resources, but both libraries depend on the statistical usage reports issued by aggregators and vendors of electronic resources when making decisions, etc. One of the reasons, therefore, for using a single sign-on at the Central Library of IMBSIU would be to determine the rate of usage of electronic resources through its web portal (Alobied, A., 2006).

### ***Interviews with the Staff of the Libraries***

There were interviews with the library staff in charge of electronic resources. The main aim of these was to find out what goes on behind the scenes, about the choice of the current approaches to delivering electronic resources, who is responsible for managing and maintaining the electronic resources in the library, and to find out if there are any future plans for developing the current approaches, how they are dealing with electronic resources after the subscription process, what methods are used to publicize the updating of electronic resources, and so on.

## **CHAPTER III**

### **REVIEW OF LITERTURE AND RESEARCH**

In the light of the successive changes in the field of information technology, and in the dispersal of information sources, as well as diversity and changes in users' expectations, libraries have been obliged to adjust their strategies and functions to take these changes into account. Electronic information sources have become part of library collections, in academic libraries in particular. In view of the multiplicity of forms and sources, providers, and the methods of providing these resources to patrons of the library, in addition to the emergence of new tools and techniques for organizing and delivery to clients, many modifications and innovations have had to be carried out.

Libraries build their collections of electronic resources in an attempt to give their communities rapid access to them.. However, finding ways to manage and deliver the library's collection of electronic resources has become a major challenge to libraries and also to librarians. Breeding (2004) states that:

"One of the key jobs of the library is delivering access to electronic resources. As the library increases its investments in electronic information—usually at the expense of print materials—it's vital to provide convenient ways for users to find the information they need within those resources" (Breeding, M. 2004).

Normally, libraries play crucial a role in delivering information resources to their users, through providing multiples channels for finding resources, such as catalogues, indexes, abstracts, and so on. It seems, however, that the situation has changed, particularly in academic libraries, with the introduction and rapid growth of electronic resources and the increase in demand for access to full text by students.

#### ***The Concept of Delivering Electronic Resources***

There is no static definition of delivering electronic resources in libraries. However, some studies have addressed the delivery of electronic resources, especially through libraries' websites, as sets of techniques, tools, and products to provide access for patrons. Lee, S. D., and Boyle, F. (2004) have described the delivery of electronic

resources as the stage which follows the acquisition of these resources. After paying invoices, the following steps are taken: cataloguing the resource and delivering it, then if possible, archiving the resource, next, publicizing its availability, followed by evaluating the use of the resource and making a decision whether to renew or cancel the subscription to it.

Brophy, P. (1998) defined resource delivery as providing "tools which enable users to gain access to the information which they have identified as being of interest of them" (Brophy, P. 1998. 254). For Brophy (1998) resource delivery in the electronic library can consist of a three-stage process. He stated that:

"in some cases resource delivery may be a three-stage process, whereby the user, having discovered an item, first requests it, the library then acquires it, and then delivers it to the user – this is the classic traditional library process expressed, for example, in a reservations or inter -library loan service" (Brophy, P. 1998. 254).

Curtis, D., and Scheschy, V. M. (2005) address in their book the methods and techniques of delivering access to electronic journals, and the preferred approaches which should be adopted by the library through its website. While the book focuses on the electronic journals, it does however include other resources such as full-text databases and bibliographic databases, as these have a relation to electronic journals, in that they provide either the full text of articles or an abstract and index (A&I) of articles.

### ***Delivery Methods and Tools***

There are no specific or standard methods of delivering electronic resources. Most of these methods and tools are, in fact, suggestions or recommendations resulting from experiments in libraries. Many studies {Alwerud, A., and Jorgensen, L. (2005). Anderson, S. (2005); Bland, R. N., et al (2002);Bluh, P. M., and Hepfer, C. (2006); Bordeianu, S., et al (2000). Briscoe, G., et al (2003);Cheng, D. T., et al (2004); Harvell, T. A. (2005) ; Leathem, C. A. (2005); Missingham, R. (2004); Nilges, C. (1998); Pattie, L.-Y. W., and Cox, B. J. (1996); Skekel, D. (2005); Wakimoto, J. C. (2003)} have presented their experiments in delivering electronic resources, and suggested some methods of delivery and solutions for overcoming problems related to delivering access to electronic resources. Breeding (2004) states

that: "To date, no single product exists that provides comprehensive management of electronic resources, including both the front-end and back-end functions discussed above" (Breeding, M. 2004). Most libraries, therefore, rely on finding appropriate approaches and solutions to deliver electronic resources through individual or coordinated efforts. Jewell, T. D. (2001) states that:

"It is clear from the time and effort invested by many libraries creating local systems for managing electronic resources that existing library management systems and software lack important features and functionality. Although developing local systems probably contributes to effective local practice, coordinated efforts to define needs and establish standards may prove to be of broad benefit" (Jewell, T. D. 2001. p 30).

There are many methods for delivering electronic resources via libraries' websites, but there is no agreement on ideal methods. As mentioned previously, these methods are largely outputs of libraries' experiments, or else are from supported tools obtained from aggregators, providers, third-party providers, or library system providers. Such tools include SFX from Ex Libris, LinkSource from EBSCO, Sirsi Resolver from Sirsi Corp.

### ***Some Methods of Delivering Electronic Resources***

#### ***Electronic Resources Gateways (ERGs)***

Many libraries establish portals or gateways of their entire electronic resources, or for specific kinds of electronic resources e.g. electronic journals, or electronic databases. Lee, S. D. and Boyle, F. (2004) define ERG thus:

"A gateway or hub is simply an index of all the electronic resources available. The term can be used to cover a variety of concepts, ranging from a local institution's attempts to bring together its electronic resources into meaningful whole" (Lee, S. D., and Boyle, F. 2004. p115).

Normally, libraries create an alphabetical list (title index) for their electronic resources (Jewell, T. D. 2001, p19). However, there are other types of list which should be taken in account when presenting electronic resources, such as: subject list (subject index) which means "grouping products into different subject areas (for example this might be individual disciplines in a university or sections in a company)

and might be a good way to present choices to the new user" (Lee, S. D. and Boyle, F. 2004, p116) In addition, this will increase users' success in retrieval (Curtis, D. and Scheschy, V. M. 2005, p260). Furthermore, personalized ERG is useful step towards providing relevant electronic resources, especially where there is a large collection of electronic resources. "With these systems, once users have identified resources of particular interest, the selected resources are visible as a default when that user logs in to the local system. Though important, such services are unlikely to become the predominant means by which most users will access libraries' electronic resources" (Jewell, T. D. 2001, p19). This is also what has been adopted by Athens Access Management System (AMS) which "provides users with single sign-on to numerous web-based services throughout the UK and overseas" (Athens, 2006).

### ***Integration with the Library's Catalogue***

This means that the library catalogues the resources and integrates this record into the library catalogue, which is normally the library's OPAC. Lee, S. D. and Boyle, F. (2004) indicates the problems which appear if a library's sole approach is ERG:

"First, it clearly goes against the proposition that an electronic resources collection should be seen as part of, and not separate from, traditional collection development..... Second, because of the way some users in certain disciplines operate, their traditional access point to collections will usually be the traditional library catalogue – the OPAC (this is very common in humanities disciplines for example). How will the items listed on the gateway come to their attention if they do not veer from this course?" (Lee, S. D., and Boyle, F. 2004. p118).

Several writers have pointed out the advantages and disadvantages of integrating electronic resources in the library's OPAC. Nilges, C. (1998) mentions the benefit which could be provided by integrating electronic resources in OPAC " the catalogue allows the library to display availability of (and provide access to) electronic resources in the context of the library's entire collection" (Nilges, C. 1998, p315). Curtis, D. and Scheschy, V. M. (2005) have presented some arguments for and against the catalogue as a gateway to electronic journals, from papers which have addressed this topic, such as the following. The arguments for the catalogue as a gateway to electronic journals are from a library-centric viewpoint, and those against, from a user-centric viewpoint:

Arguments for: "The catalogue, or index of the library's collection, is an integrated directory to the collected information, regardless of format. This gathering function is fundamental in providing ideal access to information through the organization of the catalogue. (Bevis and Graham, 2003, p.115) ". "Including electronic records in the OPAC helps to bring users back to the collections for which the library has already spent revenues by leading them to electronic and traditional (print, media, etc.) resources simultaneously. (James Veatch, quoted in Hinton, 2002, p. 54) ".

Arguments against: "The integrated library system should be a complete and accurate recording of a local library's holdings. It should not be presented to users as a primary system for locating information. It fails badly at that important job (Tennant, 2003, p.28)". "Users want to get directly to quality full-text resources as easily as possible. Your web design should not lead them to believe that the library catalog is the place to start their search. If they conduct a subject or keyword search in most catalogs they will retrieve a high proportion of records for print materials. If they are able (if the system allows it, and if they figure out the procedure) to limit their catalog search to online resources, they will still not find articles in journals" (Curtis and Greene, 2002, p. 53)." (Curtis, D. and Scheschy, V. M., 2005, p 274).

There are many issues regarding serial control within OPAC, such as the multiple fields required in MARC format (e.g. 530, 856, 710, and 655), the staff's efforts in tracking the volumes of journals, the problems of canceling subscriptions, maintaining an electronic finding aid for electronic journal locator resources and so on. Leathem, C. A. (2005) claims that "most libraries are not able to provide additional support for cataloguing electronic journals" (Leathem, C. A. 2005, p 75).

### ***Linking to Full-text***

Library users might prefer to read a full-text article rather than finding an electronic journal (Breeding, M. 2004). This means establishing links between abstracting and indexing databases on the one hand, and aggregator databases and e-

journal collections on the other (Jewell, T. D. 2001, p20). This would use the Digital Object Identifiers (DOIs) to provide links to full text (Breeding, M. 2004).

However, this may not be effective, because the link could point to an article which might be unavailable at the library (Jewell, T. D. 2001, p20). Breeding, M. 2004 refers to this issues and presents some methods which could solve this:

“This scenario has grown to be called the "appropriate copy" problem. A growing genre of products has emerged in response, both to address this problem and to offer additional services and options to searchers as they navigate among library-provided electronic resources. The basis of these products is the link resolvers that rely on a database of the library's profile of subscriptions to determine the appropriate links that a library user should be presented with in a citation. Through a standard syntactical construct called the OpenURL, the producers of A&I databases, the publishers of electronic information, and the developers of link resolvers are able to create an environment where all the components work together..... But since not all information is available electronically, other options might include a search in the online catalogue to see if the library has a print version, or an option to request the item through interlibrary loan or document delivery. These are some of the major linking products available today:

- SFX from Ex Libris,
- LinkSource from EBSCO,
- Sirsi Resolver from Sirsi Corp,
- Article Linker from Serials Solutions,..." (Breeding, M.

2004).

Many writers have pointed to the advantages of using link-resolver services, such as SFX (Jewell, T. D., 2001; Pinfield, S. 2001; Curtis, D. and Scheschy, V. M., 2005; Arant, W. and Payne, L. 2001; Bordeianu, S. et al. 2000).

### ***Cross-searching Features***

There is an increasing number of electronic resources, multiple databases, and electronic journals, and the providers, aggregators or third – parties who provide these resources. Normally, this would lead to multiplying the search interfaces for each source, but this puts a burden on the user to formulate the query many times to find out each source's features. Providing cross-searching will "allow users to search multiple sources simultaneously so they don't have to decide which resource might have the information they need" (Breeding, M. 2004). The process of this feature is based on sending the query to multiple sources according to the sources' mechanism, and then retrieving the results for the user (Breeding, M., 2004), by investing in

certain protocols, such as Z39.50 or OAI - PHM . Hence the user can use one search interface and formulate one query and search in multiple sources. There are some products which provide this facility:

- "ENCompass from Endeavor Information Systems
- MetaLib from Ex Libris
- Sirsi Single Search from Sirsi
- WebFeat Prism from WebFeat
- MuseSearch from MuseGlobal
- ZPORTAL from Fretwell-Downing". (Breeding, M., 2004)

However, there are some free cross-search products available which could do the same as the above. Providing links to some scholar portals such as Google Scholar, Windows Academic Live, and Yahoo will provide cross-searching in many databases, for instance (Jewell, T. D. 2001, p22).

### ***Advertising the Electronic Resource***

There is no specific preferred method to make users aware of new electronic resources, however, as soon as the library receives the electronic resource, they should be notified quickly (Lee, S. D., and Boyle, F. 2004. p 127). The library should utilize all the available methods to publicize everything related to electronic resources, by using E -mail group lists, printed newsletters, training workshops, posters and leaflets, notification on the library's website and so on.

### ***The Impact of Delivering Electronic Resources on the Users***

Many studies have addressed the use of electronic resources and the evaluation of Electronic Information Services (EIS). In additions, several projects have been, or are being, carried out in this area, such as the following:

The JUSTEIS Project which aims to discover user behaviour in information-seeking and the use of information technology and information services in UK higher education, by identifying current use of electronic information services, who uses the services and for what purposes. This project was founded by the Joint Information Systems Committee (JISC) and the University of Wales Aberystwyth, Department of Information Studies, in conjunction with Information Automation Limited's Centre for Information Quality Management (JUSTEIS, 2002).



Another research project is the JUBILEE (JISC User Behaviour in Information-seeking: Longitudinal Evaluation of Electronic Information Services) which

"was established to investigate the possible impacts of Electronic Information Services (EIS) on information-seeking behaviour, given an ever-increasing plethora of such information resources - whether library web pages; CD ROMs; external web-sites; on-line databases; e-journals; abstracting and indexing services; search engines, or more recently virtual learning environments" (JUBILEE. 2006).

JUBILEE has stated its aims and objectives in ongoing work:

"The main aim of the research is to monitor, investigate and evaluate the use and/or non-use of Electronic Information Services (EIS) by staff and students within UK Higher Education Institutions, and review any subsequent impacts on teaching and learning. This is being achieved by meeting the following objectives:

- Objective 1: to contextualize user interaction with EIS, where EIS is included as part of an holistic view of user information seeking behaviour, thereby illuminating both use and non-use of EIS.
- Objective 2: to use longitudinal tracking of users to determine success criteria for information seeking from the users' points of view;
- Objective 3: to incorporate success criteria to feed into an Action Plan for HE managers;
- Objective 4: to facilitate the achieving of the optimum position for an HEI where service providers' expectations of service use meet the reality (as identified by the users) of service use" (JUBILEE. 2006).

The eVALUED project, based within the evidence base at the University of Central England (UCE), Birmingham, was set up "to develop a transferable model for e-library evaluation in higher education and to provide dissemination and training in e-library evaluation, and is supported by project funding through HEFCE" (eVALUED, 2006).

### ***The Two University Libraries to be Studied***

#### ***Imam Muhammed Bin Saud Islamic University (IMBSIU) Central Library***

The central library of IMBSIU was established in 1951, and in 1975 it became a Library Deanship. The library administrates the university library and its branches. Branch libraries of the IMBSIU in the KSA:

- Female Student Centre Library in Malaz
- Social Science College in Alqassim
- Islamic Law (Sharia) and Studies in Alahssa
- Islamic Call (Dawah) in AlMadina
- Society College in Alkharj.

Branch libraries of the IMBSIU abroad:

- The Institute of Arabic and Islamic Sciences Nouakchott – Mauritania
- Islamic Law (Sharia) and Arabic Language in Ras al-Khaimah – United Arab Emirates.
- The Institute of Arabic and Islamic Sciences Jakarta – Indonesia
- The Islamic Institute in Djibouti – Djibouti
- Islamic and Arabic Institute in Tokyo Japan
- Islamic and Arabic Sciences Institute Washington – USA.

The central library covers multiple disciplines, and serves the university faculties; Islamic Law (Sharia), Arabic Language, the Fundamentals of Religion, Social Science, Islamic Call (Dawah) and Mass Communication, Computer and Information Science, Languages and Translations (Library Deanship, 2006).

The library has build up its collection from a variety of sources such as books, periodicals, manuscripts, audio-visual materials, electronic resources, government publications, and so on. The library uses the HORIZON system to manage its collections. HORIZON system was modified and translated (i.e. Arabized) by the agency Arabian Advanced Systems, which has taken the responsibility of providing:

"all kinds of libraries in the region with a wide array of cutting edge solutions, enabling them to be more efficient and productive. These solutions are provided with the highest level of customer care and support, through our customer support centers located throughout the region" (AAS, 2006)

This modification included providing a modified version of the HORIZON system.

### ***Prince Salman Central Library (PSCL)***

PSCL is the main library of King Saud University (KSU), which "was established in 1394 H, to provide library services, documentation, presenting scientific and intellectual production through publishing, exchanging and donation" (Library Deanship. 2006).

The total of the library's collection is approximately eight million volumes (Khalid, H. M. 2000, p 182). According to the library's website, however, the right total of the library's collection is (824,805) titles came in (1,998,876) volumes or materials (Library Deanship. 2006).

The library serves the university colleges:

- College of Arts
- College of Sciences
- College of Administrative Sciences
- College of Pharmacy
- College of Engineering
- College of Food And Agriculture
- College of Education
- College Of Medicine
- College of Dentistry
- College of Applied Medical Sciences
- College of Computer Sciences
- College of Architecture and Planning
- College of Languages
- College of Applied Studies and Community Service
- Community College in AlRiyadh
- College of Nursing
- College of Science in AlJouf
- Community College in AlQrayat
- Community College in ALaflaj
- Community College in AlMajma'ah

The Prince Salman Central Library (PSCL) adopted the DOBIS-LIBIS (Dortmund Bibliotheks System / Leuven Integrated Biblioteek System) system in 1984 to automate its activities (Library Deanship, 2006; Al-Saleh, 2004; Zehery, 1997; Kahlid, 2000; Siddiqui, M. A., 1997; Khurshid, Z., and Kadry, H. M., 2006).

### ***Electronic Resources in the Two Libraries***

Afeah, H. A. A. (2005) addressed the acquisition of the electronic resources in the four academic libraries, which are central library of IMBSIU, PSCL of KSU, the central library of King Abdul Aziz University (KAAU), and the central library at King Fahad University of Petroleum and Minerals (KFUPM), using description methodology to identify the methods of acquiring electronic resources in these libraries. She found that the libraries concentrated on subscribing to foreign databases, especially in English, while less consideration was given to Arabic language databases. The study presented the types of electronic resources, in addition to presenting the acquisitions policy.

The other study which addressed the growth of electronic journals in the six academic libraries is that by Dulaymi, S. T. et al (2004). This study used survey methodology to collect data, through sending questionnaires to sampling libraries. The study found that there had been a rapid increase in the numbers of electronic journals in the sampling libraries, in addition to an increase in expenditure on subscriptions to electronic journals and electronic databases over five years (1995 – 2000).

**Table (3-1): The Acquisition Budget of Electronic Resources in the Examined Libraries between 1995 – 2000 According to (Dulaymi, S. T. et al 2004, p 194)**

<b>University</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
IMBSIC	*****	*****	250,000*	250,000	250,000	350,000
KSU	*****	320,000*	700,000	117,000	726,790	872,565

\*Figures given in Saudi Riyals (1SR = 0.26667 US Dollar)

In fact, the examined libraries have paid attention to building their collection of electronic resources, and furthermore, they have expanded their budget for subscriptions to electronic databases and electronic journals. For instance, in 2005 the central library of IMBSIU paid approximately 1,107,655 Saudi Riyals for such subscriptions.

To sum up, the concept of delivering electronic resources includes all the efforts made by libraries to deliver access to electronic resources through utilization of the technologies and tools available. Therefore, delivering electronic resources is part of Electronic Resources Management (ERM). This is a vital part of ERM,

especially in that it relates to the library's role in serving its community. The examined libraries have given consideration to the collection of electronic resources. However, to the best of the researcher's knowledge, no study has as yet addressed this research topic.

**Table (3-2): Electronic Resources Available in Both Libraries**

<i><b>Electronic Resources</b></i>	<i><b>Central Library of IMBSIU</b></i>	<i><b>Prince Salman Library of KSU</b></i>
EBSCO Host: Academic Search Premier - Full-Text, ERIC, Communication & Mass Complete	√	√
Proquest: ABI Inform Global/IM, Dissertation Abstracts- and Full Text, science journals.	√	√
GEOREF	√	√
CSA: LISA - Library and Information Science Abstracts	√	√
Blackwell-Synergy	√	√
Science direct	√	√
web of knowledge	√	√
Sliver Platter Databases: Library Lit & Info Science, Books in Print, ULRICH,	√	√
IEEE: Library Literature FT	√	√
Omnifile Mega Full Text Web WILSON	√	√

**Table (3-3): Electronic Resources Available in One or Other of the Libraries**

<i>Electronic Resources</i>	<i>Central Library of IMBSIU</i>	<i>Prince Salman Library of KSU</i>
Wilson Applied Science and Technology Abstracts Full Text .	X	√
General Science Index, and Abstracts.	X	√
Biological Abstracts.	X	√
Compendes plus.	X	√
Chemvillage.	X	√
Math Sci Net.	X	√
Computer Source Database.	√	X
SAFARI Tech Books Online	√	X
Computer Select	√	X
Blackwell Synergy (Health Sciences )	X	√
Blackwell Synergy (Medicine)	X	√
Medline	X	√
Pro Quest Medical Library	X	√
Health and wellness Resource Center and Alternative Health module	X	√
Science Direct ( Medicine and Dentistry	X	√
Blackwell Synergy (Business, Economics Finance, Accounting)	X	√
Business Abstracts Full Text	X	√
PAIS International	√	X
Wilson Art Full Text	X	√
Wilson Art Abstracts	X	√
LANNEE PHILOLOGIOUE	X	√
Index Islamicus	√	X
Blackwell Synergy (Engineering , Computing and Technology)	X	√
Blackwell Synergy ( Life and Physical Science )	X	√
Blackwell Synergy (Agricultural and Animal Sciences)	X	√
Science Direct ( Agricultural Biological Science)	X	√

## **CHAPTER IV**

### **DATA ANALYSIS AND PRESENTATION**

#### **Part One**

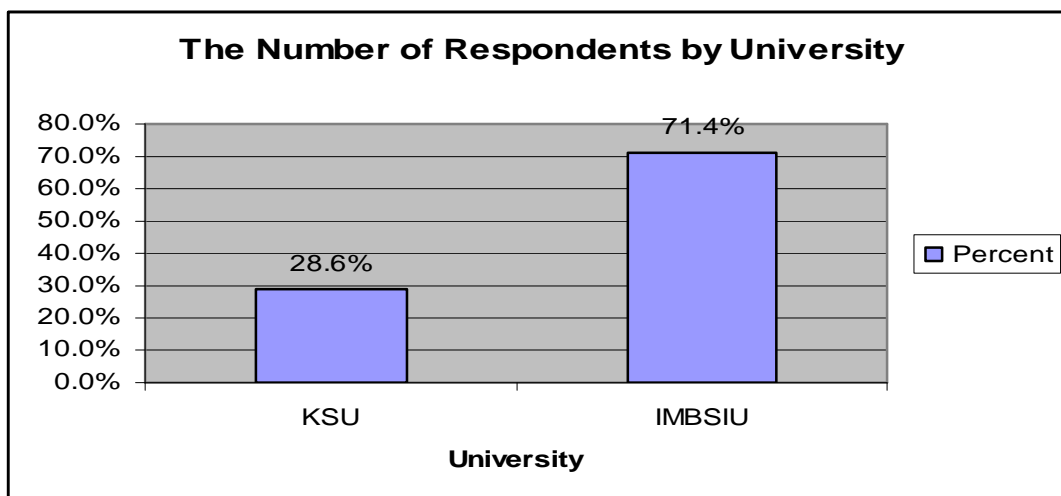
The questionnaire was sent by E-mail to the academic staff in LIS departments at both universities, on the 3<sup>rd</sup> of July, 2006. The time limit for the return of the questionnaires was the 10<sup>th</sup> of August. Fifty questionnaires were sent, and there were forty-two usable responses, giving a response rate of (84%).

**Table (4-1): Usable Questionnaires Received**

University	Questionnaires Sent	Questionnaires Received	Percentage
KSU	15	12	80%
IMBSIU	35	30	86%
<b>Total</b>	<b>50</b>	<b>42</b>	<b>84%</b>

#### **The Number of Respondents**

**Figure (4-1): The NO. Of Respondents from Each University**



It can be clearly seen that most of the questionnaires received were from the LIS department in IMBSIU, thirty out of thirty-five, that is, (86%). The number of questionnaires received from the LIS department at KSU was 12 out 15, i.e. (80%). Therefore, the percentage of respondents from the LIS department at IMBSIU was (71.4%), compared with (28.6%) from the LIS department in KSU.

### *The Respondents' Gender*

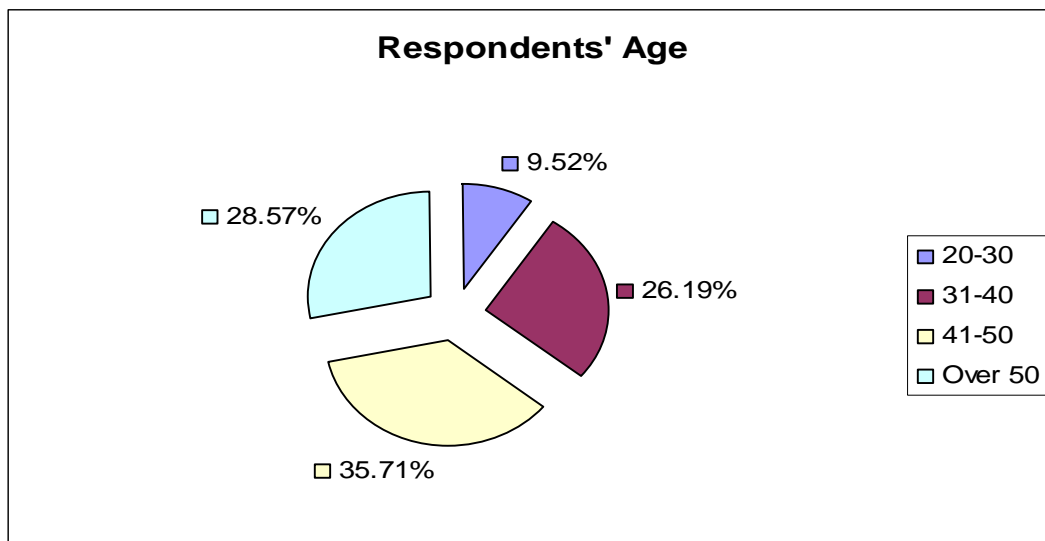
**Table (4-2): Respondents' Gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	29	<b>69.1%</b>
Female	13	<b>30.9%</b>
<b>Total</b>	<b>42</b>	<b>100%</b>

This table shows the distribution of respondents' gender; there were 29 (69.1%) males and 13 (30.9%) females. The reason for there being fewer female respondents is that the total number of females in the sample was just seventeen, all of them belonging to the LIS department at IMBSIU. The LIS department at KSU has no female employees, as it does not provide academic programmes for female students in its Female Studies Centre, unlike IMBSIU.

### *The Respondents' Age Groups*

**Figure (4-2): Respondents' Age Groups**

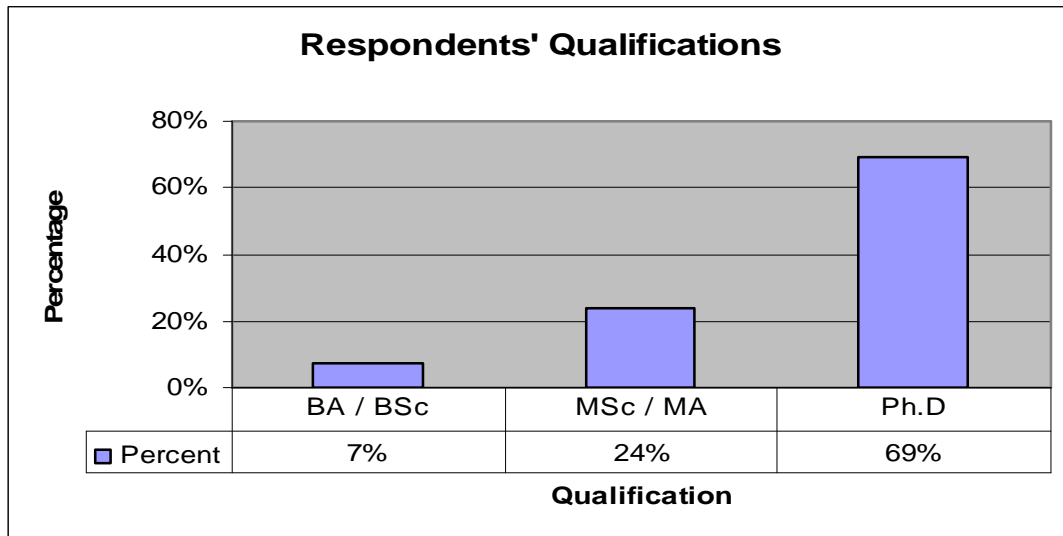


This figure presents the age groups of respondents. (35.71%) of respondents were aged between 41 and 50 and (28.57%) were aged over 50. (26.19%) of respondents were aged between 31 and 40. The rest of the respondents were aged between 20 and 30 (9.52%).



### *Respondents' Qualifications*

**Figure (4-3): Respondents' Qualifications**



The figure presents the qualifications of respondents. Most of the respondents have a Ph.D (69%) in LIS, while (7%) of respondents have BA/BSc. The rest of the respondents have MSc / MA degrees (24%).

### *Respondents' Work Places*

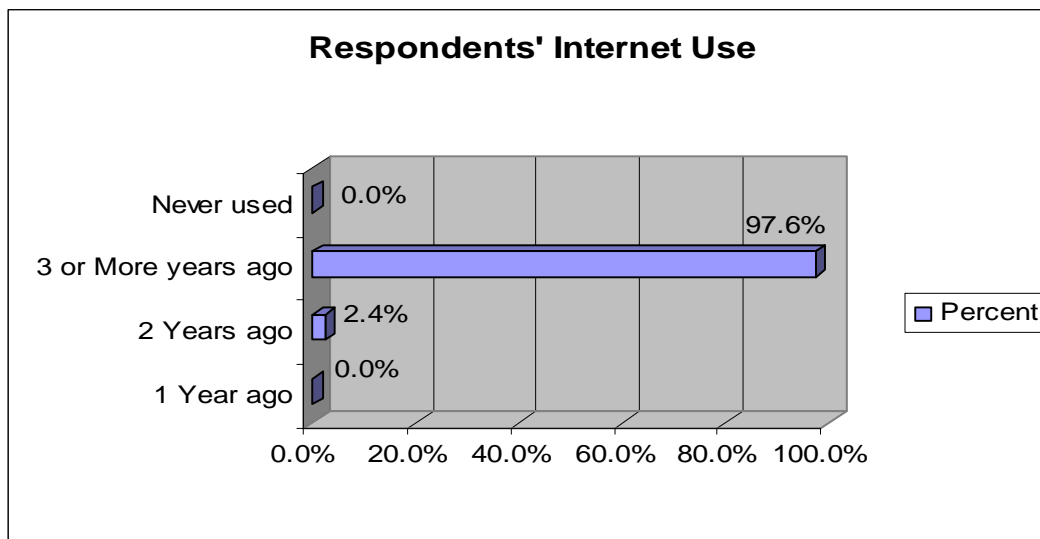
**Table (4-3): Respondents' Work Place**

University	Frequency	Percent
IMBSIU	30	71%
KSU	12	29%
<b>Total</b>	<b>42</b>	<b>100%</b>

There were 30 respondents from IMBSIU which equals (71%) of the total, with those from KSU 12 making up the other (29%).

### *Respondents' Internet Use*

**Figure (4-4): Respondents' Internet Use**



The figure presents the internet use of respondents. It can be clearly seen that the majority of respondents have been using the internet for 3 years or more, and they make up (97.6%) of the total number of respondents. The remainders of the respondents (2.4%) have been using the internet for two years.

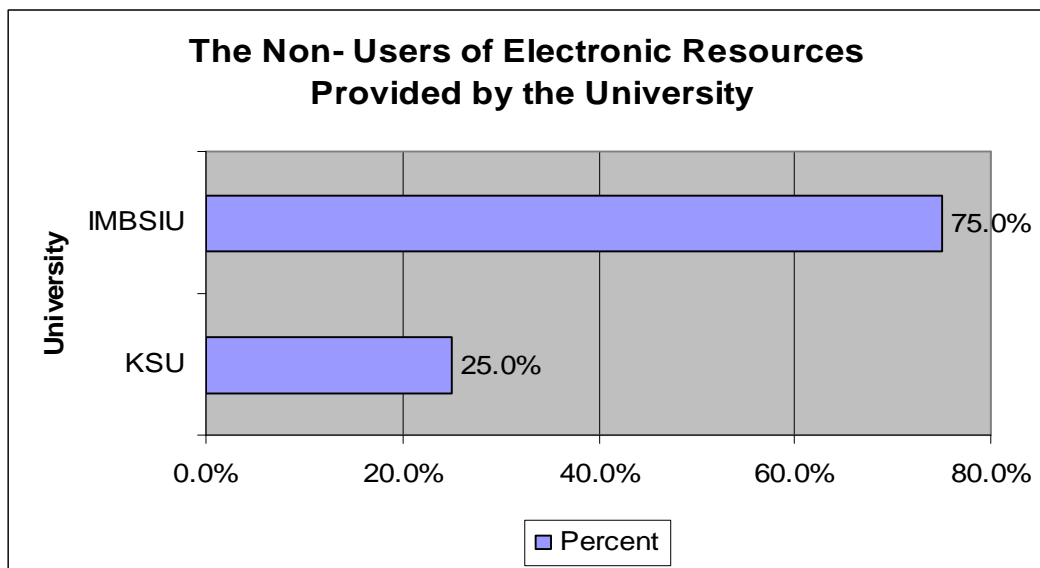
### *Use of the Libraries' Electronic Resources by Respondents*

**Table (4-4): The Use of Electronic Resources**

<b>Electronic resources use</b>	<b>Frequency</b>	<b>Percent</b>
Yes	30	<b>71.4%</b>
No	12	<b>28.6%</b>
<b>Total</b>	<b>42</b>	<b>100.0%</b>

The table shows the numbers and percentages of the academic staff who reported using the electronic resources that are provided by the studied libraries. Whereas 30 respondents (71.4%) use the electronic resources, which are provided by the studied libraries 12 respondents (28.6%) do not use these electronic resources. The distribution of non-users of the electronic resources of the studied libraries is shown in Figure (4-5).

Figure (4-5): Non-Users of Electronic Resources



The majority of non-users of the electronic resources of the studied libraries are from the IMBSIU (75%) Of the numbers of non-users, as shown in the previous table, 25% were KSU respondents, who do not use the electronic resources which are provided by their university library.

***The Frequency of Use of Electronic Resources***

The respondents who do use the electronic resources in their university library were asked to state how frequently they use these resources.

Table (4-5): Respondents' Frequency of Use of Electronic Resources

Frequency of use	Frequency	Percent
Several times a week	7	23.3%
Several times a month	19	63.3%
Once a month or less	4	13.3%
<b>Total</b>	<b>30</b>	<b>100.0%</b>

Most of the respondents, 19 of them (63.3%), stated that they used the electronic resources several times a month. Seven respondents used the electronic resources several times a week, i.e. a rate of (23.3%). Four respondents (13.3%) stated that they used the electronic resources once a month or less.

### ***Other Institutions Used by Respondents***

Respondents were asked to state if they used other electronic resources provided by other universities or institutions. The responses are shown in the table below:

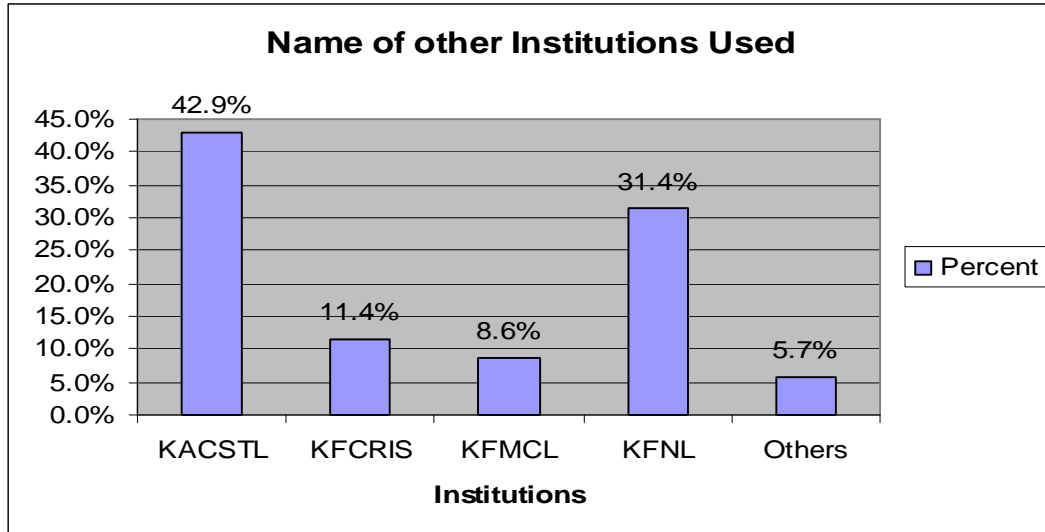
**Table (4-6): Other Institutions and Universities Used by Respondents**

<b>Other Universities or Institutions</b>	<b>Frequency</b>	<b>Percent</b>
No	7	16.7%
Yes	35	83.3%
<b>Total</b>	<b>42</b>	<b>100.0%</b>

There were 7 respondents (16.7%) who stated that they have not used electronic resources provided by other institutions or universities, while 35 respondents (83.3%) affirmed that they use electronic resources provided by other institutions.

To find out which universities or institutions these were, the respondents were asked to state these sources, which is illustrated in Figure (4-6).

**Figure (4-6) Name of other Institutions Used**



The figure illustrates the other sources (universities or institutions), whose electronic resources have been used by the respondents. The electronic resources provided by King Abdulaziz City for Science and Technology Library (KACSTL) were most widely-used by respondents (42.9%). King Fahad National Library (KFNL) provides a wide range of electronic resources, and these were the second most widely-used, with (31.4%) of respondents using them. The electronic resources

in the King Faisal Centre for Research and Islamic Studies (KFCRIS) have been used by (11.4%) of respondents, while the electronic resources which are provided by King Fahad Medical City Library (KFMCL) have been used by (8.6%) of respondents. (5.7%) of respondents have also used electronic resources provided by other institutions and universities.

### ***Types of Electronic Resources***

Respondents were asked to identify the types of electronic resources which are provided by their university library. The outcome of the responses is illustrated in the following table:

**Table (4-7): Types of Electronic Resources**

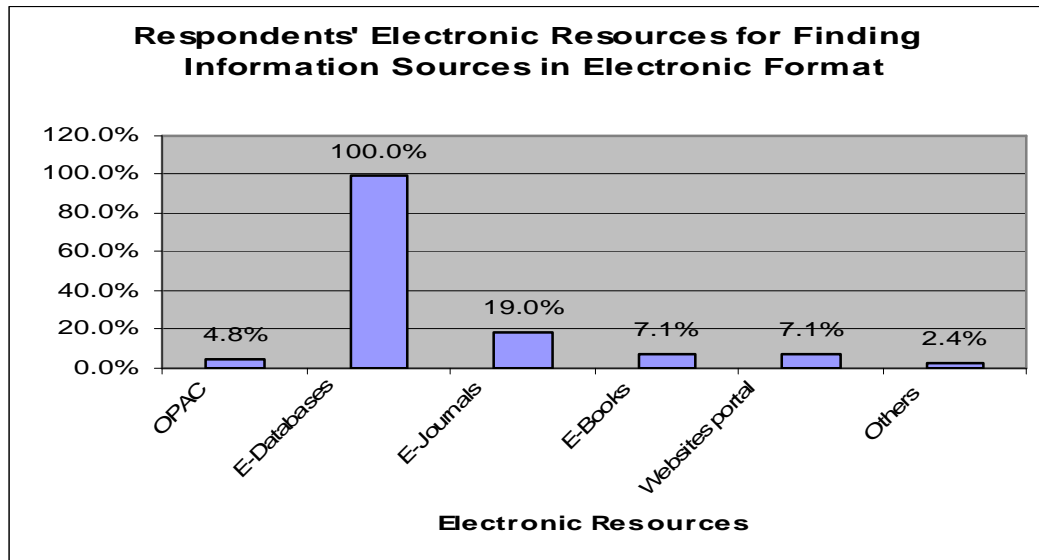
<b>Types of Electronic Resources</b>	<b>Frequency</b>	<b>Percent</b>
Bibliographic Databases	40	<b>95.2%</b>
Full-text Databases	42	<b>100.0%</b>
Library's OPAC	42	<b>100.0%</b>
Electronic Journals	8	<b>19.0%</b>
Electronic Books	3	<b>7.1%</b>
Websites Portal	12	<b>28.6%</b>
Search Engines or Subject Directories	0	<b>0.0%</b>
Others	0	<b>0.0%</b>

There was clear agreement from all 42 respondents (100%) that both universities' libraries provide two kinds of electronic resources, which are Full-text Databases and the library's OPAC. There were 40 respondents (95.2%) stated that the university's library provides bibliographic databases. 12 respondents (28.6%) stated that the university's library provides a websites portal, which may include website collections or other libraries' websites, while 8 respondents (19%) stated that the university's library provides electronic journals, and 3 respondents (7.1%) indicated that the university's library provides electronic books. Again respondents agreed that, the universities' libraries do not, however, provide links to search engines or subject directories. Also, respondents assented that there are no other electronic resources, such as open archive repositories.

### ***Electronic Resources Used for Finding Information Sources***

Respondents were requested to identify which electronic resources are used for finding or searching for information sources in electronic formats. The responses are illustrated in the following figure.

**Figure (4-7): Respondents' Electronic Resources for Finding Information Sources**



The figure illustrates the location which respondents used for finding electronic information identity, such as an electronic article, by utilizing the electronic resources which are available via the university's library website. All the respondents used Electronic Databases for finding and searching for electronic information identity. Electronic databases, of course, include bibliographic databases, and full-text databases. The most widely-used electronic resources were electronic databases. The second most widely-used electronic resources were electronic journals with a rate of 19%) Electronic books and the websites portal were the same (7.1%), while the library's OPAC was used by only 4.8% of respondents. Other electronic resources used for finding or searching for electronic formats were used at a rate of 2.4%.

### *Respondents' preferred methods for publicity*

**Table (4-8): Preferred Methods for Publicity**

<b>Methods</b>	<b>Frequency</b>	<b>Percent</b>
E-Mail	40	<b>95.2%</b>
Telephone	12	<b>28.6%</b>
Notices on the library's website	41	<b>97.6%</b>
Letters to the department	42	<b>100.0%</b>
Posters and leaflets	17	<b>40.5%</b>

The respondents were asked to identify their preferred methods for notifying about new or updated electronic resources in the university's library. All 42 respondents (100%) preferred to receive letters about new electronic resources or requests for subscription upgrades. The second most popular method was notices on the library's website, cited by 41 respondents (97.6%). Publicity through E-mail was the third preference for 40 respondents (95.2%). Posters and leaflets in the library's building came next, being cited by 17 respondents (40.5%). Twelve respondents (28.6%) favoured calling them on the telephone.

### *The Existing Barriers to the Delivery of Access to Electronic Resources*

The respondents were asked to identify whether some elements existed in the library's website. The responses is illustrated in the following table

**Table (4-9): Barriers to Delivery of Access**

<b>Elements</b>		<b>Yes</b>	<b>No</b>	<b>Don't Know</b>	<b>Total</b>
Easy access to electronic resources	Frequency	41	1	0	<b>42</b>
	Percent	97.6%	2.4%	0.0%	<b>100.0%</b>
Easy to search for and find electronic resources	Frequency	17	21	4	<b>42</b>
	Percent	40.5%	50.0%	9.5%	<b>100.0%</b>
Availability of information and instructions	Frequency	3	39	0	<b>42</b>
	Percent	7.1%	92.9%	0.0%	<b>100.0%</b>
Use of single access number	Frequency	27	12	3	<b>42</b>
	Percent	64.3%	28.6%	7.1%	<b>100.0%</b>
Notification of new or updated electronic resources	Frequency	0	37	5	<b>42</b>
	Percent	0.0%	88.1%	11.9%	<b>100.0%</b>

Forty-one (97.6%) respondents answered that access to electronic resources via the library's website was easy; however one respondent replied that easy access to electronic resources does not exist. In regard to finding and searching for electronic

resources 17 responds (40.5%) stated that it was easy to find and search for electronic resources. However, approximately half of the respondents stated that it was difficult to find or search for electronic resources, and 4 respondents (9.5%) stated that they did not know. The majority of respondents (92.9%) agreed that there was no availability of information and instructions to help in using the electronic resources, although, in contrast, 3 respondents stated that there was availability of information and instructions. Concerning use of a single sign – on number to access all the electronic resources, 27 (64.3%) of respondents answered that a single access number was used, while 12 (28.6%) stated that this was not the case, and 3 (7.1%) stated that they did not know. 37 respondents (88.1%) responded that there was no notification of new or updated electronic resources via the library's website, and 5 respondents (11.9%) responded that they did not know.

The existing barriers to the delivery of access to electronic resources by each university's library:

Respondents were asked to identify the barriers to the delivery of access to electronic resources by each university's library. Two tables present those barriers.

**Table (4-10): Barriers to Access Delivery on KSU Library's Website**

<b>Elements</b>		<b>Yes</b>	<b>No</b>	<b>Don't Know</b>	<b>Total</b>
Easy access to electronic resources	Frequency	11	1	0	<b>12</b>
	Percent	91.7%	8.3%	0.0%	<b>100.0%</b>
Easy to search for and find electronic resources	Frequency	7	3	2	<b>12</b>
	Percent	58.3%	25.0%	16.7%	<b>100.0%</b>
Availability of information and instructions	Frequency	1	11	0	<b>12</b>
	Percent	8.3%	91.7%	0.0%	<b>100.0%</b>
Use of single access number	Frequency	0	12	0	<b>12</b>
	Percent	0.0%	100.0%	0.0%	<b>100.0%</b>
Notification of new or updated electronic resources	Frequency	0	10	2	<b>12</b>
	Percent	0.0%	83.3%	16.7%	<b>100.0%</b>

This table illustrates the existing barriers in delivering access to electronic resources in the KSU library's website, according to the academic staff in the university. Most of the respondents (91.7%) from LIS at KSU stated that the access to electronic resources via the library's website was easy. One respondent, however, stated that the access to electronic resources through the library's website was not easy. Finding and searching for electronic resources via the library's website was easy



to 7 respondents (58.3%), while 3 respondents (25%) stated that it was not easy. The rest of the respondents, (16.7%) said they did not know. The majority of respondents, 11 of them (91.7%), stated that there was no availability of information and instructions to help in using the electronic resources; however, only one respondent said there was information and instruction to help in using the electronic resources. All the respondents stated that a single sign - on was not used to access electronic resources. Ten respondents (83.3%) stated that there was no notification of new or updated electronic resources via the library's website. Two respondents said that they did not know whether there was notification or not.

**Table (4-11): Barriers to Access Delivery on IMBSIU's Library Website**

<b>Elements</b>		<b>Yes</b>	<b>No</b>	<b>Don't Know</b>	<b>Total</b>
Easy to access electronic resources	Frequency	30	0	0	<b>30</b>
	Percent	100.0%	0.0%	0.0%	<b>100.0%</b>
Easy to search for and find electronic resources	Frequency	10	18	2	<b>30</b>
	Percent	33.3%	60.0%	6.7%	<b>100.0%</b>
Availability of information and instructions	Frequency	2	28	0	<b>30</b>
	Percent	6.7%	93.3%	0.0%	<b>100.0%</b>
Use of a single access number	Frequency	28	0	2	<b>30</b>
	Percent	93.3%	0.0%	6.7%	<b>100.0%</b>
Notification of new or updated electronic resources	Frequency	0	27	3	<b>30</b>
	Percent	0.0%	90.0%	10.0%	<b>100.0%</b>

This table represents the barriers to delivering access to electronic resources in the IMBSIU library's website according to the LIS academic staff in the university. All respondents agreed that accessing electronic resources via the library's website was easy. Eighteen respondents (60%) stated that searching for and finding electronic resources through the library's website was not easy. Nevertheless, there were 10 respondents (33.3%) who stated that it was easy to search for and find electronic resources via the library's website, and two respondents (6.7%) who said they did not know. Two respondents (6.7%) stated that there was availability of information and instructions to help in using the electronic resources on the library's website; nonetheless, there were 28 respondents (93.3%) who stated that there was no availability of information and instructions to help in using the electronic resources on the library's website. Use of a single number to access electronic resources through the library's website was in existence according to 28 respondents (93.3%); however,

there were two respondents who stated that they did not know. Twenty-seven respondents (90%) stated that there was notification of new or updated electronic resources via the library's website, and 3 respondents stated that they did not know.

***Delivering Electronic Resources from the Respondents' Point of view***

In this section the respondents were asked their opinion as to how significant some factors were in having a negative effect on the use of electronic resources delivered through the library's website, from very significant to not significant at all. These factors are, in fact, some of the methods used for delivering electronic resources; however, the research expressed these methods as factors to discover how aware the participants' were and how they felt about these factors. The varying degrees, ranging from very significant to not significant at all, shed light on the respondents' awareness of and feelings about the role of delivering electronic resources. The responses are shown in the following tables:

**Table (4-12): The Effects of Certain Factors in Delivering Access**

Factors		Very significant	Significant	Undecided	Not significant	Not significant at all	Total
No lists of EJs	Frequency	11	26	2	3	0	<b>42</b>
	Percent	26.2%	61.9%	4.8%	7.1%	0.0%	<b>100.0%</b>
No cataloguing of ERs	Frequency	25	15	0	2	0	<b>42</b>
	Percent	59.5%	35.7%	0.0%	4.8%	0.0%	<b>100.0%</b>
No linking to full-text databases or EJs	Frequency	7	27	5	3	0	<b>42</b>
	Percent	16.7%	64.3%	11.9%	7.1%	0.0%	<b>100.0%</b>
No single access number	Frequency	37	5	0	0	0	<b>42</b>
	Percent	88.1%	11.9%	0.0%	0.0%	0.0%	<b>100.0%</b>
No websites collection	Frequency	4	16	0	20	2	<b>42</b>
	Percent	9.5%	38.1%	0.0%	47.6%	4.8%	<b>100.0%</b>
No EJs	Frequency	32	10	0	0	0	<b>42</b>
	Percent	76.2%	23.8%	0.0%	0.0%	0.0%	<b>100.0%</b>
No instruction or guide	Frequency	40	2	0	0	0	<b>42</b>
	Percent	95.2%	4.8%	0.0%	0.0%	0.0%	<b>100.0%</b>
No website frame in used library	Frequency	5	20	2	13	2	<b>42</b>
	Percent	11.9%	47.6%	4.8%	31.0%	4.8%	<b>100.0%</b>
No proper channel for publicity	Frequency	34	8	0	0	0	<b>42</b>
	Percent	81.0%	19.0%	0.0%	0.0%	0.0%	<b>100.0%</b>

Most of the respondents stated that there being no list of electronic journals had a negative effect on the use of electronic resources, with the responses of very significant and significant at 11 (26.2%) and 26 (61.9%) respectively. However, 3 respondents (7.1%) stated that there was no significant effect on the use of electronic resources, and 2 respondents (4.8%) were undecided. The majority of respondents agreed that their being no cataloguing of electronic resources has an effect on the use of electronic resources, and this effect was very significant according to 25 respondents (59.5%) while 15 respondents (35.7%) found it significant. Two respondents (4.8%), were of the view that there was no significant effect from there being no cataloguing of electronic resources. Thirty-five respondents (88.1%) emphasized that using a single access number had a positive effect on using the electronic resources provided through the library's website. Furthermore, there were 5 respondents (11.9%) stated that not using a single number had a significant negative effect on using the electronic resources. Therefore, all respondents agreed on the necessity of unifying the access number for the electronic resources. When the respondents were asked to what extent the library not having a websites collection had a negative effect on using the electronic resources, 4 respondents (9.5%) stated that it was very significant, and 16 respondents (38.1%) stated significant. However, 20 respondents (47.6%) stated that this would not have a significant negative effect on using electronic resources, and 2 respondents (4.8%) stated that would not have any significant negative effect at all. All the respondents agreed that not providing electronic journals affects the use of electronic resources in a negative way. Thirty-two respondents (76.2%) stated that this was very significant, and 10 respondents (23.8%) stated that it was significant. Not providing a comprehensive guide to using the electronic resources has a very significant negative effect according to 40 respondents (95.2%). and a significant effect for 2 respondents (4.8%). Respondents were asked if not using the library's website frame could affect the use of electronic resources negatively, and 5 respondents (11.9%) thought it could affect it very significantly, and 20 respondents (47.6%) felt the effect was significant. However there were 13 respondents (31%) who were of the opinion that this had no significant negative effect on using electronic resources, and 2 respondents (4.8%) thought it had no significant negative effect at all. Not using a proper channel for publicity had a

very significant negative effect for 34 respondents (81%), and 8 respondents (19%) stated that the negative effect was significant

### ***Respondents' Satisfaction***

Respondents were asked to rate their satisfaction with the approaches of delivering access to electronic resources via the studied libraries' websites.

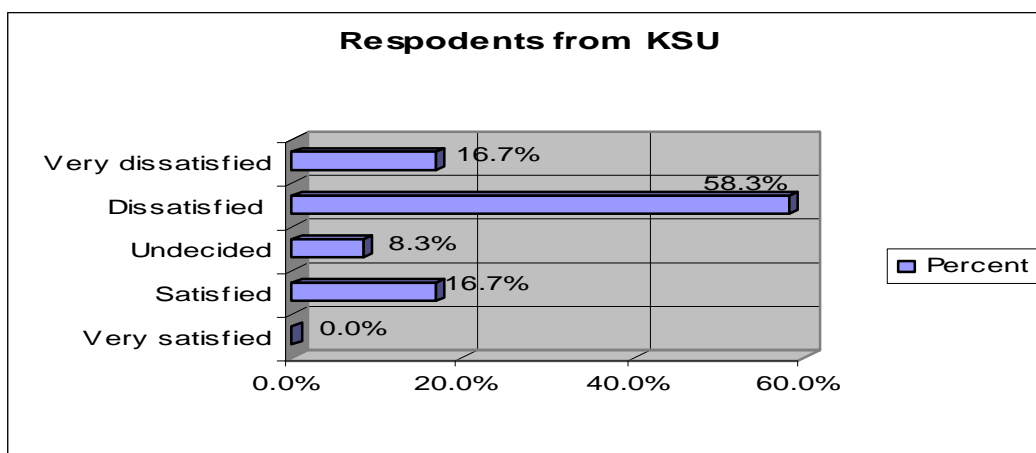
**Table (4-13): Respondents' Satisfaction**

<b>Satisfaction</b>	<b>Frequency</b>	<b>Percent</b>
Very satisfied	1	<b>2.4%</b>
Satisfied	6	<b>14.3%</b>
Undecided	2	<b>4.8%</b>
Dissatisfied	28	<b>66.7%</b>
Very dissatisfied	5	<b>11.9%</b>
Total	42	<b>100.0%</b>

Only one respondent (2.4%) was very satisfied with the library's methods of delivering electronic resources, and 6 respondents (14.3%) were satisfied. However, there were 28 (66.7%) respondents who showed their dissatisfaction with the methods adopted by the studied libraries in delivering their electronic resources through their websites, and five respondents (11.9%) stated that they were very dissatisfied. Two respondents (4.8%) were undecided.

The following figures illustrate the satisfaction ratio for each university:

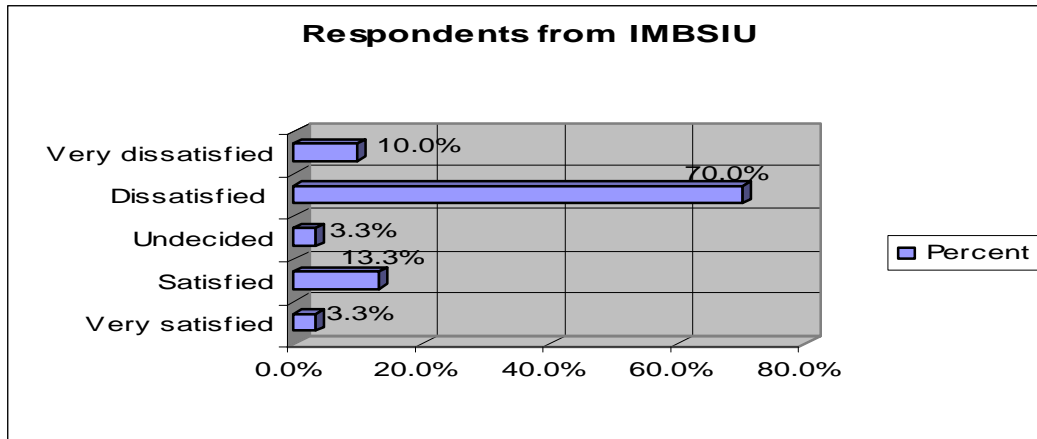
**Figure (4-8): Satisfaction of Respondents from KSU**



This figure illustrates the satisfaction of respondents from the LIS department at KSU. It can be clearly seen that respondents showed their dissatisfaction with a rate of (58.3%), and that (16.7%) respondents were very dissatisfied. However (16.7%) of

respondents were satisfied with the delivery of electronic resources via the library website. 8.3% of respondents were undecided.

**Figure (4-9): Satisfaction of Respondents from IMBSIU**



This figure shows the satisfaction of respondents from the LIS department at IMBSIU. 3.3% of respondents showed that they were very satisfied with the methods of delivering electronic resources via the library's website, and 13.3% of respondents stated they were satisfied. Nonetheless, there were (70%) of respondents who were dissatisfied with how the library delivers access to electronic resources via the library's website, and 10% of respondents were very dissatisfied. There were (3.3%) of respondents who were undecided.

## ***Part Two***

This part presents methods which were adopted by the examined libraries for delivering electronic resources. The information in this part came from: first, the examined libraries' websites, which were inspected and studied over more than three months to keep track of updates in the research topic, as there were updates to the libraries' websites, such as in mid-June when the IMBSIU library's website took the initiative of using its library's website frame to present and search through aggregators' and vendors' databases. Moreover, the library has initiated the use of a single sign-on number to access its electronic resources. Second, those members of the libraries' staff responsible for managing electronic resources were interviewed by the researcher, in order to find out the processes and procedures involved in managing and delivering electronic resources through their websites.

### ***Acquisition of Electronic Resources in the Two Libraries***

Both libraries work through the libraries' consortium. Acquisition is one of the most significant parts of the consortium. Acquiring electronic resources, therefore, has caught the attention of libraries in KSA, especially in the light of the decreasing libraries budget. Recently, the Ministry of Higher Education in KSA is in charge of organizing the acquisition of electronic resources in the libraries of Saudi universities. However, this role was done by PSCL at KSU.

Both universities' libraries build up their collection of electronic resources, according to the acquisition policy for each university library (Afeah, H. A. A., 2005; Dulaymi, S. T. et al., 2004).

### ***The Process of Delivering Access to Electronic Resources for each University***

#### ***PSCL's Website of KSU***

After receiving an electronic resource, the library places a link to the electronic resource in its website (Figure: 4-10), through the electronic resources page (Figure: 4-11). The library advertises this electronic resource by sending letters to the university's departments, as well as sending the user name and password. The library also "uses the E-mail addresses of the academic staff to publicize this electronic

resource Moreover, the library issues leaflets, one part of which presents the electronic resources to which the library subscribes"(Alqhtani, N. 2006).

Figure (4-10): PSCL's Home Page



Figure (4-11): PSCL's Electronic Resources Page

مصادر المعلومات الإلكترونية  
الخارجية على الإنترنت

أشراكات جامعة الملك سعود في قواعد المعلومات على الإنترنت 2006

1	PQ ABI/INFORM Global	(نص كامل)	أعمال
2	PQ Science Journals	(نص كامل)	علوم
3	PQ Medical library	(نص كامل)	طبية، صحية
4	PQ Biology Journals	(نص كامل)	علوم وتقنية
5	Dissertation Abstracts	(مستخلص)	رسائل جامعية
<b>Link:</b> <a href="http://www.proquest.com">http://www.proquest.com</a>			
6	NTIS	(مستخلص)	تقنية
7	ERIC	(مستخلص)	تربية
8	Medline	(مستخلص)	طبية
9	Academic Search Premier	(نص كامل)	عامة
<b>Link:</b> <a href="http://search.epnet.com">http://search.epnet.com</a>			
10	Library Lit & Info Science	(مستخلص)	مكتبات
11	Books in Print	(مستخلص)	كتب
12	ULRICH	(مستخلص)	نشرات
13	INSPEC	(مستخلص)	هندسة
<b>Link:</b> <a href="http://web5s.silverplatter.com">http://web5s.silverplatter.com</a>			
14	GEOREF	(مستخلص)	جغرافيا
<b>Link:</b> <a href="http://www.dialogsite.com">http://www.dialogsite.com</a>			
15	Health and wellness Resource Center and Alternative Health module	(نص كامل)	طبية
16	Infotrac Onefile	(نص كامل)	عامة
<b>Link:</b> <a href="http://infotrac.london.galegroup.com/itweb/ksu/">http://infotrac.london.galegroup.com/itweb/ksu/</a>			
17	Blackwell	(نص كامل)	طبية
<b>Link:</b> <a href="http://www.blackwell-synergy.com">http://www.blackwell-synergy.com</a>			
18	Omnifile Mega Full Text Web WILSON	(نص كامل)	إحصائيات
<b>Link:</b> <a href="http://hwrclay.hwilsonweb.com/cgi-bin/jumpstart.cgi?sp">http://hwrclay.hwilsonweb.com/cgi-bin/jumpstart.cgi?sp</a>			
19	SCIENCE DIRECT	(نص كامل)	علوم وتقنية
<b>Link:</b> <a href="http://www.sciencedirect.com">www.sciencedirect.com</a>			
20	Compendex	(مستخلص)	هندسة
<b>Link:</b> <a href="http://www.ei.org/engineeringvillage2">http://www.ei.org/engineeringvillage2</a>			
21	ISI	(مستخلص)	عامة
<b>Link:</b> <a href="http://access.isiproducts.com/wosnochem">http://access.isiproducts.com/wosnochem</a>			
22	IEEE	(نص كامل)	هندسة
<b>Link:</b> <a href="http://ieeexplore.ieee.org/Xplore">http://ieeexplore.ieee.org/Xplore</a>			
23	نشرات جامعة الملك سعود		
<b>Link:</b> <a href="http://www.alkhazindar.com.sa/onlinejournals/ksu.asp">www.alkhazindar.com.sa/onlinejournals/ksu.asp</a>			
24	OVID Collection	(نص كامل)	طبية
<b>Link:</b> <a href="http://gateway.ovid.com">http://gateway.ovid.com</a>			
25	LISA		
<b>Link:</b> <a href="http://www.csa.com">http://www.csa.com</a>			
يتم تشغيل القاعدة برنامج خاص بها			
26	Chemical Abstracts	(مستخلص)	
<b>Link:</b> <a href="http://www.ei.org/engineeringvillage2">http://www.ei.org/engineeringvillage2</a>			
27	ASKZAD		
<b>Link:</b> <a href="http://www.askzad.com/zed.asp">http://www.askzad.com/zed.asp</a>			



- عمادة شؤون المكتبات
- مكتبة الأمير سلطان المركزية
- المكتبات الفرعية
- المركز الإلكتروني العربي
- المركز الإلكتروني الأجنبي
- مصادر المعلومات الإلكترونية
- قوائم الاشتراكات
- الاتصال بنا
- المطبعة الرئيسية



## PSCL's Electronic Resources Page

PSCL's home page has links to electronic resources in categories on the right hand side (Figure: 4-10). These links guide the user to the electronic resources page (Figure: 4-11). The title of this page mentions the electronic databases, but there is no mention of electronic journals for, instance.

Types of information provided through the PSCL's electronic resources (Figure: 4-12) are the following:

1. Titles of Electronic Databases
2. Types of Electronic Databases (e.g. Full-Text or Bibliographic).
3. Subject Categories.
4. URL of the aggregator, or vendor of Electronic Resources

Figure (4-12): Description of PSCL's Electronic Resources

رقم	العنوان	النوع	الموضوع	الرابط
1	PQ ABI/INFORM Global	(نص كامل)	أعمال	
2	PQ Science Journals	(نص كامل)	العلوم	
3	PQ Medical library	(نص كامل)	طب، صحة	
4	PQ Biology Journals	(نص كامل)	علوم وتكنولوجيا	
5	Dissertation Abstracts	(مختصر)	رسائل جامعية	
Link:	<a href="http://www.proquest.com">http://www.proquest.com</a>			
6	NTIS	(مختصر)	تكنولوجيا	
7	ERIC	(مختصر)	تربية	
8	Medline	(مختصر)	طب	
9	Academic Search Premier	(نص كامل)	عامة	
Link:	<a href="http://search.epnet.com">http://search.epnet.com</a>			

There is no subject gateway of electronic resources, nor is there an alphabetical gateway. It is as shown in (Figure: 4-12), with electronic databases arranged according to the aggregators or providers, identification of electronic databases types (full-text or bibliographic), and clarifications of the subject scope of the electronic resources by use of one term (subject heading), such as Business, Science, Medical, Science and Technology, etc...

The library does not provide a list of electronic journals, although an alphabetical title list of journals in paper format to which the library has subscribed is provided, (Figure: 4-13)

Figure (4-13): Alphabetical List of Journals

SOCIAL AND HUMANITIES PERIODICALS SUBSCRIPTION FOR 2004 G.TITLES LIST						
Sl. No.	Title/Subtitle	ISSN	Origin	Class#	Freq.	Location
1	ABACUS	0001-1047	UK	637	SN	CF
2	ACCOUNTABILITY	0001-4664	UK	637	M	CE
3	ACCOUNTANT	0001-4710	UK	637	W	IC
4	ACCOUNTING AND BUSINESS RESEARCH	0001-4100	UK	637	Q	CF
5	ACCOUNTING AND FINANCE	0810-5291	AI	637	2/SN	CE
6	ACCOUNTING ORGANIZATIONS & SOCIETY	0361-3687	UK	637	KN	IC

The library does not catalogue the electronic resources, and does not provide records of electronic resources through its OPAC, so using the library's OPAC to look for electronic resources does not work.

In the library's website there is no instruction or guide to help in using or searching in electronic resources.

There is no use of a single sign-on to access all the electronic resources; each electronic database has different access number.

The library does not use context-sensitive linking such as Digital Object Identifier DOI and Open URL.

The library does not provide a websites collection, nor links to external search engines or subject directories.

### ***General Observations***

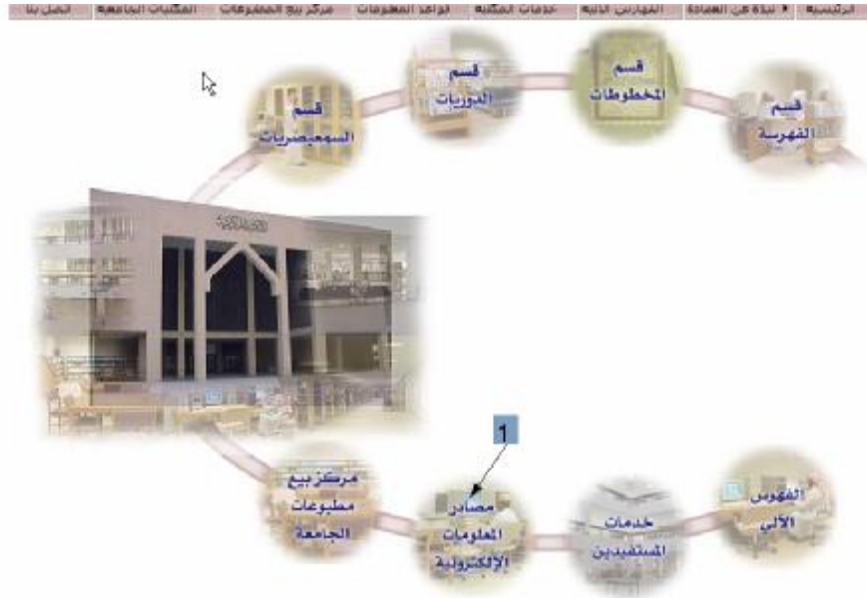
The hyper links of some databases, such as ProQuest URL, have been written wrongly. When the user clicks on the ProQuest link, the opened window cannot be found, as an error has been made in writing the URL ([www.proquest.comt](http://www.proquest.comt)).

### ***Central Library's Website of IMBSIU***

When the library receives an electronic resource from the aggregators or vendors, the electronic resource is integrated into the electronic resources page (Figure: 4-14). The library has authorized AAS to maintain and update the library's website (Figure: 4-15). The library uses E-mail addresses of its communities and

users to make them aware about new or upgraded electronic resources, and also sends letters to the university faculties to advertise electronic resources.

**Figure (4-14): IMBSIU Central Library Home Page**



### **The IMBSIU Central Library Home Page**

There is a direct link (1) to the electronic resources on the first page in (Figure: 4-14).

This link leads the user to the electronic resources page (Figure: 4-15)



The electronic resources page includes the following information:

1. The title of the page (Deanship of library affairs).
2. The library statement, which includes the fact that the library has subscribed to some global electronic resources, whether those electronic resources provide full-text articles or bibliographic data, and a User Services Department contact number if there is any query.
3. Entry to the electronic databases
4. Titles of databases
5. User guide for some of the electronic databases
6. Descriptions of databases: this includes a definition of databases and subjects covered.

The electronic resources page is considered ERG, as all the electronic resources were arranged by the aggregators or vendors. However, there is no division of the electronic resources according to subject or discipline.

The library has adopted a unified access number (a single sign-on) to access all the electronic resources, through using the borrower ID (Figure: 4-16).

**Figure (4-16): Single Sign-on to Electronic Resources**



The screenshot shows the website interface for the Iman Central Library. At the top, there is a header with the text "قواعد المعلومات الإلكترونية" (Electronic Information Rules) and the library's name "جامعة الإمام محمد بن سعود الإسلامية" (Imam Muhammad bin Saud Islamic University) in Arabic. A logo of the university is visible on the right. Below the header, the main content area displays a message: "Welcome to Iman Central Library. The resources you have requested are restricted. Please enter:" followed by a text input field labeled "Borrower ID رقم الهوية المستعمل" (Borrower ID) and a "Login" button.

The library has taken the step of using the library's website frame to search through databases (Figure: 4-17)

Figure (4-17): The Library's Website Frame for Searching in Electronic Databases



The library does not catalogue electronic resources, and does not provide links from its OPAC to electronic resources.

The library does not use context-sensitive linking such as Digital Object Identifier (DOI) and Open URL.

The library does not have a website collection, and does not provide links to external search engines or subject directories.

### **General observations**

Some electronic databases still require a different sign-on number to access them; the library has not sorted this out yet (Figure: 4-18). The library does not, however, provide the other sign-on numbers for these databases.

Figure (4-18): Some Electronic Databases which Require another Sign-on Number

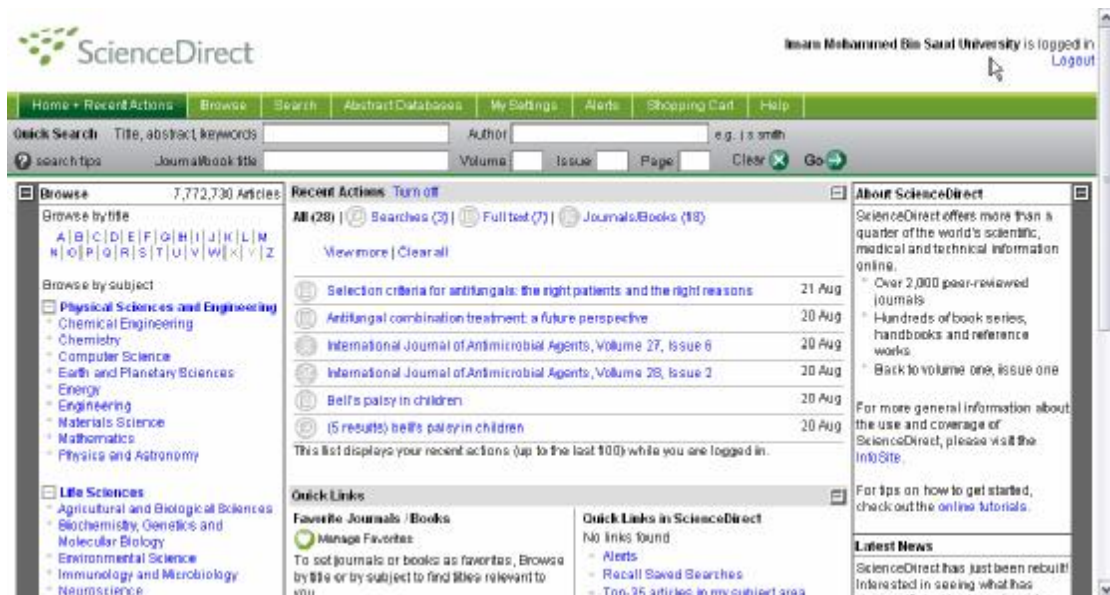






Some databases do not appear through the library's website frame, those electronic databases appear in new window (Figure: 4-19). This requires retyping the user ID.

**Figure (4-19): Electronic Databases Appeared in New Window**



Some electronic resources do not have descriptions or a user guide to assist in using these resources in the library's website.

Figure (4-20): Lack of Providing Information and Instruction to Some Electronic Databases



The library has subscribed to some electronic databases that are not in the subject area which the library serves. For example, the library has subscribed to CSA ILLUMINA to provide Library and Information Science Abstracts (LISA), whereas, in fact, the library has subscribed to MEDLINE (1), although the library does not cover medical subjects. What is more, the library has subscribed twice to the one database from two different aggregators. This database is ERIC (2), which is provided by CSA and EBSCO Host. (Figure: 4-21)

Figure (4-21): CSA Databases





The following table illustrates the methods for delivering access to electronic collections which have been adopted in the examined libraries.

**Table (4-14): Delivering Electronic Resources in the Examined Libraries**

Methods	PSCL of KSU	Central Library of IMBSIU
Dividing electronic resources according their type (e.g. electronic databases, electronic journals, etc)	<b>X</b>	<b>X</b>
Providing an electronic resources gateway in alphabetical order	<b>X</b>	<b>X</b>
Providing an electronic resources gateway by subject order	<b>X</b>	<b>X</b>
Providing electronic resources gateway by department order	<b>X</b>	<b>X</b>
Cataloguing electronic resources	<b>X</b>	<b>X</b>
Using OPAC to retrieve the electronic resources	<b>X</b>	<b>X</b>
Providing a list of electronic journals subscribed to by the library	<b>X</b>	<b>X</b>
Using context – sensitive linking (e.g. DOI, Open URL, Jack 2 MARC)	<b>X</b>	<b>X</b>
Using a single sign-on to access electronic resources	<b>X</b>	√
Using the library's website frame for searching through the electronic resources	<b>X</b>	√
Providing a comprehensive guide and descriptions of all the electronic resources	<b>X</b>	<b>X</b>
Using multiple methods to make users aware of new or updated electronic resources (e.g. E- mail, letters, leaflet)	√	√
Notification of new or updated electronic resources	<b>X</b>	<b>X</b>

## ***CHAPTER V***

### ***DISCUSSION, CONCLUSION, AND RECOMMENDATIONS***

This study aimed to discover the methods for the delivery of electronic resources through library websites which were adopted in the studied libraries. In addition, the study attempted to find out to what extent those methods affect the use of electronic resources by the users of the examined libraries.

#### ***Delivery Methods in the Studied Libraries***

Table (4-14) presents the methods which are use to deliver electronic resources in the two studied libraries, and also mentions those methods which are not used. The methods employed in both libraries focus on the awareness stage; both libraries use multiple methods to publicize new electronic resources or to obtain feedback on or evaluation of existing electronic resources.

There were deficiencies in the adoption as well as the creation of an electronic resources portal, which includes electronic resources titles, and electronic resources aggregators or vendors. PSCL added to the subject range of electronic resources by using one term to identify the subject area of electronic resources; however this could affect the understanding of the electronic resources subject. For instance, some of the terms do not exactly match electronic database subjects, e.g. the Academic Search Primer database which is provided by EBSCO covers a variety of subjects, but the library has chosen 'General' to identify the subject, and this is also the case for Infotrac Onefile from Thomson. Therefore, individualizing the gateway for subjects and forms could lead the user to find the desired resources more easily.

The studied libraries are lacking in the use of some standard methods, such as Open URL. Using this could reduce the cost of using many electronic resources especially if the payment is pay-per-view, and also reduce the effort required by users to find full-text articles, for example.

There is a crucial lack of experience in dealing with electronic resources on the part of the staff in the examined libraries. Some of the staff did not even know that their libraries provided electronic journals, nor did they know that electronic resources might be catalogued. What is more, the libraries do not provide training programmes

in electronic resource management for their staff; the libraries seek solutions from library system providers, such as AAS, or from the aggregators and vendors of electronic resources. Moreover, neither library provides workshops or training programmes in using electronic resources to their communities.

### ***The Impact of the Delivery of Electronic Resources on the Users of the Studied Libraries***

The research assumed that there is an exponential relationship between the level of delivery of electronic resources to end-users, and the improvement in the use of these electronic resources by the end-users, through the library website. A standardized scientific approach to the delivery of electronic resources, therefore, would lead to an improvement in the use of electronic resources and more considerable investment in them by the end-users. To find out the impact of delivery methods on the users of the studied libraries, a questionnaire was used and the data of this questionnaire was analyzed in Chapter Four. The findings of this analysis are as follows:

### ***The Use of Electronic Resources***

Through data analysis it appeared that more than quarter of the respondents do not use the electronic resources provided by the studied libraries (see Table 4-4). This reflects the fact that there are a number of users of the studied libraries turning away from using the electronic resources of these libraries. In addition, Table 4-6 shows that the majority of respondents (83.3%) use electronic resources provided by other institutions or universities. This could indicate that the users of the electronic information services (EIS) provided by the studied libraries found these services insufficient. The respondents indicated the other sources which they used (e.g. KACSTL, KFCRIC, KFMCL, and KFNL).

### ***Types of Electronic Resources***

Both of the examined libraries provide sets of electronic resources which include bibliographic databases, full-text databases, electronic journals, electronic books, and the library's OPAC (Afeah, H. A. A., 2005; Dulaymi, S. T., et al, 2004). When the respondents were asked what electronic resources were provided through the libraries' websites, just 8 respondents (19%) stated that the university's library

provides electronic journals, and 3 respondents (7.1%) indicated that the university's library provides electronic books, so the lack of definition of the types of electronic resources by the library through establishing portals of electronic journals, for instance, could affect the use of these resources by the users. In the case of searching for an article in electronic journals, the user assumes that he or she will not find the article through the library's electronic resources, because the library does not provide electronic journals. However both libraries have in fact taken out subscriptions with some aggregators who provide electronic journals, such as EBSCO host electronic journals services (Curtis, D., and Scheschy, V. M., 005).

### ***Electronic Resources Used for Finding Information Sources in Electronic Formats***

Neither of the libraries catalogue electronic resources, nor have they established gateways. They do not use cross-searching facilities, nor do they even add links to some academic search engines (e.g. Google Scholar).

This restricts the options of finding electronic resources in electronic formats to a single option, that of electronic databases, which was the respondents' answer (see Figure 4-7). There was agreement among the respondents that the search location was electronic databases. This has advantages and disadvantages; however, despite the advantages, this is contrary to the role of the library, which is that variation of access points to information, such as by using all types of catalogues, indexes, abstracts, all of which aim to facilitate access to information.

### ***Barriers to Delivery of Access***

Tables 4-9, 4-10, and 4-11 illustrate the existing barriers of delivering access to electronic resources through the libraries' websites. Difficulties in searching for and finding electronic resources, unavailability or insufficient of information and instructions for using electronic resources, and not giving notification of new or updated electronic resources acted as barriers to delivering resources in both libraries, according to the respondents' answers. Not using a single sign-on to access electronic resources is also a barrier, in PSCL especially. The reasons for this are the delivery methods which were adopted by the libraries; the lack of existing electronic resource gateways, the cataloguing of electronic resources, lack of provision of a comprehensive guide to using electronic resources, not using a single sign-on, and not

giving notification of new electronic resources by certain signals (e.g. new, update, trial, and so on), have created difficulties in using electronic resources via the libraries' websites.

### ***Delivery Methods from Respondents' Points of View***

The respondents were asked if the fact that these factors or methods do not exist or are not used in the library's website would have a negative effect on the use of electronic resources via the libraries' websites (See Table 4-12). These methods are not available in the websites of either library, or are available in that of only one of them, such as use of a single sign-on, which is not available in PSCL.

The responses were that all these factors would have a negative effect, either a significant or very significant one, on the use of electronic resources, apart from not using the library's website frame, and not inserting a websites collection into the library's website, which would not have a negative effect.

### ***Respondents' Satisfaction***

Table 4-13 shows the respondents' satisfaction with the delivery of electronic resources via the studied libraries' websites. The responses indicated that 33 respondents (78.6%) were dissatisfied with the methods which were used by the studied libraries. It would appear that this dissatisfaction results from not adopting and using the proper methods to deliver access to electronic resources via the libraries' websites.

## ***Conclusion***

The research shows there are deficiencies in the delivery of access to electronic resources through the studied libraries' websites, due to them not utilizing certain products and methods, which are used in many academic libraries, to help to improve delivery of electronic access, such as using context-sensitive linking (e.g. DOI, Open URL), creating subject and forms gateways to electronic resources, linking to search engines, or subject directories. The absence of utilizing these methods affected the rate and effectiveness of using the electronic resources provided by the studied libraries. The impact could be seen in the use of electronic resources, the awareness by the users as to what types of electronic resources the libraries have,

lack of access points to electronic resources, lack subjects or forms gateways, not cataloguing the electronic resources and integrating the electronic resources into the library's OPAC, and difficulties in finding electronic information sources in electronic format due to the absence of context-sensitive linking.

### ***Recommendations***

1. The library should improve its methods in delivering electronic resources through its website by adopting the latest methods in managing electronic resources, particularly concerning the delivery of electronic resources.
2. The library should invest the up-to-date technology provided by the library system automation, such as Dynix, the provider of the HORIZON system, which provides Electronic Resources Management (ERM) to manage electronic resources. Moreover, this service has recently been translated into Arabic by AAS, who provides the system to Arabic libraries (AAS. 2006).
3. The library should use various ways to notify and inform users about new and updated electronic resources. The library could create a blog to advertise the electronic resources, and could use some up-to-date technology, such as RSS (Really Simple Syndication) feeds, to publicize new or updated electronic resources.
4. The library should provide training programmes in electronic resource management for their staff, as well as holding workshops and training programmes for their communities.

### ***Further studies***

While conducting this study, the researcher discovered some areas which should be the subject of study, such as the use of electronic resources in Arabic countries, as well as information seeking by researchers, studies in the field of applications of electronic resources management, and the capability to use blogs and RSS in libraries and information centre services.

## *Appendices*

### *Appendix A: Letters to Departments and Participations*

**The Head of LIS Department**

**At IMBSIU / KSU**

*Dear Sir:*

May Allah's peace, mercy and blessings be upon you.

I am carrying out research to obtain a Masters degree from the University of Strathclyde in the United Kingdom. This research concerns electronic resources which are provided by the IMBSIU / KSU through its website. One of the research tools is a questionnaire, which is directed to the academic staff in your department. I would therefore be grateful if you would allow me to distribute the questionnaires by sending them to the E-mail addresses of the academic staff.

Thank you for your cooperation and contribution

Sulieman Salem Alshuhri

MSc Student

University of Strathclyde

\*\*\*\*\*@[gmail.com](mailto:*****@gmail.com)

Mobile Phone: \*\*\*\*\*

Home Phone: \*\*\*\*\*

**To Academic Staffs who are in abroad**

*Dear Colleague*

May Allah's peace, mercy and blessings be upon you.

I am carrying out research to obtain a Masters degree from the University of Strathclyde in the United Kingdom. This research concerns the electronic resources which are provided by the IMBSIU through its website, and I am going to conduct a survey for users of these electronic resources. To the best of my knowledge, you are studying abroad. Therefore, I would like to ask you if you use the electronic resources which are provided by the university. Please send your answer to the following e – mail address.

Thank you in advance.

Suliaman Salem Alshuhri

MSc Student

University of Strathclyde

\*\*\*\*\*@[gmail.com](mailto:*****@gmail.com)

Mobile Phone: \*\*\*\*\*

Home Phone: \*\*\*\*\*



رسالة الى رئيس قسم المكتبات والمعلومات  
جامعة الامام محمد بن سعود الاسلامية  
جامعة الملك سعود

حفظه الله

سعادة رئيس قسم المكتبات والمعلومات/

السلام عليكم ورحمة الله وبركاته

أقوم حالياً بإجراء بحث للحصول على درجة الماجستير من جامعة استراثكلاید بالملكة المتحدة. هذا البحث يتعلق بمصادر المعلومات الالكترونية المقدمة من خلال مواقع مكتبي جامعة الامام محمد بن سعود الاسلامية وجامعة الملك سعود. وكأحد ادوات جمع البيانات هي الاستبانة والموجهة الى اعضاء هيئة التدريس بالقسم. لذا فيني امل التكرم بالسماح لي بتوزيع الاستبانة على اعضاء هيئة التدريس بقسمكم، من خلال ارسالها على عناوين البريد الالكتروني لإعضاء هيئة التدريس.

شاكرا لكم حسن تعاونكم معي....

سليمان بن سالم الشهري  
طالب ماجستير  
جامعة استراثكلاید  
البريد الالكتروني  
هاتف المنزل:  
الهاتف المحمول:

رسالة الى اعضاء هيئة التدريس الذين يدرسون بالخارج

رعاك الله

الزميل /

السلام عليكم ورحمة الله وبركاته

حيث اني اقوم حاليا بإجراء بحث لنيل درجة الماجستير من جامعة استرثكلايد بالمملكة بالمتحدة. وهذا البحث يتناول تقديم خدمة مصادر المعلومات الالكترونية من خلال موقع جامعة الامام محمد بن سعود الاسلامية، وارغب في توزيع استبانة على المستخدمين الفعليين من المصادر الالكترونية. ولعلمي انكم تكملون دراستكم العليا في الخارج. لذا فأني امل ان تفيديوني إذا ما كنتم تستخدمون تلك المصادر من خلال موقع الجامعة، وإرسال الاجابة على بريدي الالكتروني.

ولك الشكر مقدماً...

سليمان بن سالم الشهري

طالب ماجستير

جامعة استرثكلايد

البريد الالكتروني

هاتف المنزل:

الهاتف المحمول:

## ***Appendix B: Questionnaires in English and Arabic***

### **Dear Participant:**

May Allah's peace, mercy and blessings be upon you (Assl'am Al'ekumm wa' Rahmatu' Allah wa' Braktuhh).

I am carrying out research to obtain a Masters degree from the University of Strathclyde in the United Kingdom. The aim of this research is to identify the approaches and techniques to delivering access to electronic resources provided by academic libraries. Part of this research is to discover the impact of the methods of delivering electronic resources which have been adopted by the library in question.

As you are experienced and knowledgeable in the Library and Information Science field, you have been selected to be one of the samples. You are requested to fill in this questionnaire and return it by e-mail to the e-mail address below.

All the information given will be strictly confidential, and used only for research purposes; therefore, you are encouraged to feel free to give your honest opinion. In addition, if you wish to obtain a copy of the research, simply send an e-mail to the e-mail address below.

Thank you for your cooperation and contribution

Sulieman Salem Alshuhri

MSc Student

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[Sulsam777@gmail.com](mailto:Sulsam777@gmail.com)

Mobile Phone: 00447886688402

Home Phone: 00441415648809

**N.B. the following definitions are used in this questionnaire:**

***Electronic resources:*** all the resources which are provided by the university library in electronic form.

***Library's website<sup>2</sup>:*** the electronic website of the university library on the Internet.

***Delivering electronic resources:*** the approaches to presenting, organizing, and delivering electronic resources via the library's website.

**Part 1: Please tick the appropriate answer**

1. Name (optional)

2. Gender                      Male    Female

3. Age                      20 -30                      31-40                      41- 50                      Over 50

4. What is your highest educational qualification?                      BA / BS                      MSc / MA                      Ph.D

5. Which university do you work in?                      Imam Muhammad Bin Saud Islamic University                      King Saud University

---

<sup>2</sup>The reason for giving this definition is that (موقع) in Arabic has many meanings such as location, place, and website, when here we mean the Internet.

6. **When did you start using the internet?**

A year ago                  Two years ago                  Three or more years ago                  Have never used it

**Part 2: Please tick the appropriate answer**

7. **Do you use the electronic resources which are available on the Internet via the library's website?**

Yes                                  No (Go to Q 9)

8. **How frequently do use the electronic resources within the library's website?**

Several times a week                          Several times a month                          Once a month or less

9. **Do you use electronic resources provided by other universities or institutions?**

NO                                  Yes (please specify):

**Part 3: Please tick the appropriate answer (you can choose more than one answer)**

10. **What the electronic resources are provided via the library's website?**

- Bibliographic Databases
- Full-text Databases
- Library's OPAC
- Electronic Journals
- Electronic Books
- Websites Portal (website collections available on the library's website; e.g. friends' websites, other libraries' websites, websites of various disciplines)
- Search Engines or Subject Directories ( e.g. GOOGLE Scholar, Yahoo)
- Others (Please specify).....

11. **Which of the library's electronic resources do you use when searching for information sources in electronic format?**

- The Library's OPAC
- Electronic Databases
- Electronic Journals
- Electronic Books
- Websites Portal
- Other Electronic Resources (please specify).....

12. **Which of the following methods is most appropriate to update you about new electronic resources, upgrading your subscription, etc.?**

- Through your e-mail.
- Through calling you on the telephone.

- Notices on the library's website.
- Sending letters to your department
- Posters and leaflets in the library building.

**Part 4: Please tick the appropriate answer (you can choose more than one answer)**

**13. As far as electronic resources are concerned, are the following elements provided on the library's website?**

	Yes	No	I Don't Know
Easy access to electronic resources through the library's website			
Easy to search for and find of electronic resources through the library's website			
Availability of information and instructions to help in using the electronic resources.			
A single access number for all the electronic resources available through the library's website			
Notification of new or updated electronic resources through the library's website			

**14. In your opinion, how significant are the following factors in having a negative effect on the use of electronic resources through the library's website?**

	Very Significant	Significant	Undecided	Not Significant	Not Significant at all
There are no alphabetical or subject lists of Electronic Journals in the library's website					
There is no cataloguing of electronic resources, and subsequent integration into the library's OPAC.					
There is no linking to full-text or using Open URL Based					
There is no single number to access all the electronic resources					
There is no websites collection mentioned in the library's website					
No electronic journals are provided through the library website					
There is no instruction or comprehensive guide to using electronic resources via the					

library's website

The library's website frame cannot be used to search and navigate through electronic resources

No proper channel is used to make users aware of new resources

**Part 5: Please tick the appropriate answer**

15. How satisfied you are with delivering electronic resources via your library website?

Very satisfied	satisfied	Undecided	dissatisfied	Very dissatisfied
----------------	-----------	-----------	--------------	-------------------

16. Please add any comments or suggestions about delivering electronic resources via the library's website ( Here ):

**Thank you very much**

أخي / اختي عضو هيئة التدريس بقسم المكتبات والمعلومات سلمك الله  
السلام عليكم ورحمة الله وبركاته:

أفيدكم بأنني أقوم حالياً بإتمام بحث للحصول على درجة الماجستير من جامعة استراثكلاند في بريطانيا. والهدف من هذا البحث هو التعرف على الاساليب والطرق المتبعة في توصيل أوعية المعلومات الالكترونية للمستفيد النهائي من قبل المكتبات الجامعية. وكجزء من البحث كانت هذه الاستبانة لاستطلاع وجهة نظرك حول مدى تأثير الطرق المتبعة في توصيل مصادر المعلومات الالكترونية على فعالية الاستخدام، ولما تتمعون به من خبرة ودراية في مجال المكتبات والمعلومات كنتم من بين العينة المنشودة. فالبحث ايضا يحاول تقييم تلك الاساليب والطرق، ولكن من وجهة نظر ذوي الاختصاص.

لذا ارجو التكرم بملء هذا الاستبيان، ومن ثم اعادة ارساله الى البريد الالكتروني الموضح ادناه في اقرب وقت ممكن. في حالة وجود استفسارات او الرغبة في الحصول نسخة من البحث ارجو عدم التردد في ارسل رسالة الالكترونية الى البريد الالكتروني ادناه. واود ان اشير ان كافة المعلومات التي سوف تقوم بتعبئته سوف تكون تحت كامل السرية المطلقة، ولن تستخدم إلا لغرض البحث العلمي.



شكرا لكم حسن تعاونكم وجميل صنعكم،،،

اخوكم:

سليمان بن سالم الشهري

مبتعث من قسم المكتبات والمعلومات

جامعة الامام محمد بن سعود الاسلامية

\*\*\*\*\*

رقم الهاتف المحمول: \*\*\*\*\*

رقم هاتف المنزل: \*\*\*\*\*

مصطلحات ارجو مراعاتها في هذا الاستبيان:

- اوعية المعلومات الالكترونية: هي كل مصادر المعلومات الالكترونية المقدمة من المكتبة الجامعية.
- موقع المكتبة: هو الموقع الالكتروني للمكتبة على شبكة الانترنت.
- توصيل اوعية المعلومات الالكترونية: هي الطرق والاساليب المتبعة في عرض وتقديم وتنظيم اوعية المعلومات الالكترونية من خلال موقع المكتبة.

الجزء الاول: فضلاً ضع علامة صح (√) امام الاجابة المناسبة

1. الاسم ( اختياري):
2. الجنس: ذكر انثى
3. العمر: 20-30 31-40 41-50 فوق 05
4. ماهي اخر درجة علمية حصلت عليها: بكالوريوس ماجستير دكتوراه
5. ماهي الجامعة التي تعمل بها حالياً: جامعة الامام محمد بن سعود الاسلامية جامعة الملك سعود
6. متى بدأت استخدام الانترنت؟ قبل سنة واحدة قبل سنتين قبل ثلاث سنوات او اكثر لا استخدمه

الجزء الثاني: فضلاً ضع علامة (√) امام الخيار المناسب

7. هل تستخدم اوعية المعلومات الالكترونية المتاحة من مكتبة الجامعة من خلال موقعها على الانترنت لاحتياجاتك المعلوماتية؟

نعم لا (انتقل الى السؤال 9)

8. ما معدل استخدامك لإوعية المعلومات الالكترونية المتاحة من مكتبة الجامعة من خلال موقعها على الانترنت؟

عدة مرات في الاسبوع  
عدة مرات في الشهر  
مرة في الشهر او اقل

9. هل تستخدم اوعية معلومات الالكترونية مقدمة من قبل جامعات او مؤسسات تعليمية اخرى؟  
نعم لا (اذكرها لطفاً):

الجزء الثالث: فضلاً ضع علامة (√) امام الخيارات المناسبة (يمكن اختيار اكثر من اجابة)

10. ماهي اوعية المعلومات الالكترونية المقدمة من مكتبة الجامعة والمتاحة من خلال موقعها على الانترنت؟

قواعد معلومات الالكترونية ببليوجرافية  
قواعد معلومات الالكترونية نصية ( النصوص الكاملة)  
فهرس المكتبة الالكتروني المباشر  
الدوريات العلمية الالكترونية  
الكتب الالكترونية

بوابة بمواقع الانترنت ( مجموعة من مواقع الانترنت متاحة من خلال موقع المكتبة على الانترنت مثل، مواقع صديقة، او مكاتب اخرى، أو مواقع تهتم بتخصصات او موضوعات معينة)

محركات بحث وادلة موضوعية ( متاحة من خلال موقع المكتبة مثل: Google Scholar, or Yahoo)

11. عند البحث عن معلومات، اي من اوعية المعلومات الالكترونية المتاحة على موقع المكتبة تستخدم للحصول على مصدر في صورته الالكترونية (مثل مقالة الالكترونية)؟

فهرس المكتبة الالكتروني المباشر  
قواعد المعلومات الالكترونية  
الدوريات العلمية الالكترونية  
محركات البحث والادلة الموضوعية المشار لها في موقع المكتبة  
اوعية معلومات الالكترونية اخرى ( لطفاً اذكرها):

12. اي من القنوات التالية تراها مناسبة لتبليغك عن اوعية المعلومات الالكترونية الجديدة، او

طلبات تجديد الاشتراك، او ما شابه ذلك؟

بريدك الالكتروني  
الاتصال الهاتفي  
الاعلان في موقع المكتبة على الانترنت  
ارسال خطابات الى الاقسام العلمية  
مطويات وإعلانات داخل مبنى المكتبة

### الجزء الرابع: الرجاء وضع علامة (√) مقابل كل خيار

13. هل ترى ان العناصر التالية متوافرة في موقع المكتبة على الانترنت، فيما يتعلق بأوعية المعلومات الالكترونية؟

نعم لا لا ادري

سهولة الوصول الى أوعية المعلومات الالكترونية من خلال موقع المكتبة  
سهولة التنقل و البحث عن اوعية المعلومات الالكترونية من خلال موقع المكتبة  
توافر كمية كافية من الارشادات للمساعدة في استخدام اوعية المعلومات الالكترونية من خلال موقع المكتبة.  
توحيد رقم الدخول ( اسم المستخدم، الرقم السري) لكافة اوعية المعلومات الالكترونية المتاحة خلال موقع المكتبة والتي تتطلب ذلك.  
الاعلان عن ما يستجد من اوعية المعلومات الالكترونية من خلال موقع المكتبة.

14. من وجهة نظرك؛ هل العوامل التالية تؤثر سلباً في استخدام اوعية المعلومات الالكترونية المتاحة من خلال موقع المكتبة الجامعية؟

عدم وجود قوائم هجائية او موضوعية بالدوريات  
الالكترونية المشتركة بها المكتبة من خلال موقع المكتبة.  
عدم فهرسة اوعية المعلومات الالكترونية وادراجها في فهرس المكتبة الالكتروني المباشر (OPAC).  
عدم وجود نظم للربط بين قواعد المعلومات الببليوجرافية و قواعد المعلومات النصية او الدوريات العلمية الالكترونية (مثل: (Open-URL (SFX).  
عدم توحيد رقم الدخول (اسم المستخدم، الرقم السري) لأوعية المعلومات الالكترونية.  
عدم وجود روابط لمحركات بحث او ادلة موضوعية(مثل: Google Scholar, Yahoo) في موقع المكتبة.  
عدم توفير دوريات الالكترونية من ضمن مجموعات المكتبة  
عدم وجود تعليمات او دليل شامل للمساعدة في استخدام مصادر المعلومات الالكترونية

عدم استخدام اطار المكتبة للبحث في مصادر  
المعلومات الالكترونية  
عدم استخدام قنوات مناسبة للاحاطة بما يستجد  
بخصوص مصادر المعلومات الالكترونية

الجزء الخامس: الرجاء وضع علامة (√) مقابل الخيار المناسب

15. ما مدى رضائك عن الطرق التي تتبعها المكتبة في توصيل مصادر معلومات الانترنت من خلال موقعها على شبكة الانترنت؟

راضي جداً	راضي	محايد	غير راضي	غير راضي جداً
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16. اي ملحوظات او مقترحات تود اضافته، والتي تتعلق بطرق توصيل اوعية المعلومات الالكترونية من خلال موقع المكتبة.  
(هنا):

شكراً جزيلاً لك، واسئلكم الله العلي القدير ان يجزيك خير الجزاء على ماقدمت.

اخوك

سليمان بن سالم الشهري

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