

# Library Online Database System for Undergraduate Students

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## Abstract

**Objectives:** The demand of the good quality of research especially in academic field rose the emerging of library online databases services nowadays. Most of the universities in Malaysia have subscribed the library online databases to provide students more opportunity to explore research resources not limited only in certain regions but throughout all countries around the world. The services are expected to give benefit to the postgraduate and undergraduate students for academic purposes. However, most of undergraduate students are not aware of the existence of library online databases services that universities provided. They also discouraged to use the services due to the difficulties they faced when they used the services. **Methods/Statistical Analysis:** Interviews and Quantitative Research (survey) have been used as data collection method. The stratified random sampling technique was used to collect data from undergraduate students with different countries, age, gender, courses and level of study from (Year 1 to Year 4). The sample is scattered throughout 16 faculties in International Islamic University Malaysia (IIUM). **Findings:** From the study, current issues and problems were identified, features of library online database systems were analyzed then selected to be adapted into the future development of library online database system in International Islamic University Malaysia, IIUM library. **Application/Improvements:** The study is able to enhance the current IIUM library online databases flows and processes. The features selected to be adapted in future development of IIUM library online database system can attract students to use online databases to find information.

**Keywords:** Library Online Database, Library Online Database System, Information Searching, Search Engine

## 1. Introduction

As the demand of qualified researchers for development purpose is higher, there is demand as well from the researchers on how to find an accurate and relevance information for their studies. Traditionally, the researchers use the common research methods in order to get the information for example talking with people, focus groups, personal interviews, telephone surveys or review all available materials from books or journals that available in library. However, the traditional methods have limited the researcher's findings because the issue of limited references available. In year 1999, Internet was introduced and the researchers demand became possible<sup>1</sup>.

This new era has evolved the library online database for researchers use. The library online database providers have collected all the books, researchers' journals, articles, conference papers and store it in their databases. It then can be accessed by all users worldwide via Internet connection. Aware of the importance of library online database especially in academic fields, the Malaysia government has allocated special fund to restructure the rural libraries and provide it with Internet access. From year 2005 to 2010, 475 units of rural libraries were built with a budget of RM 50 million while RM 83.5 million was spent to purchase library materials. Other than that, between these years the total of pages the library materials digitalized is 763,866 pages or 45,695 items<sup>2</sup>. Though,

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the library online database services have been provided by most of universities, apparently most of students' especially undergraduate students were reported, not using the library online database services provided. Study was conducted during the fall 2009 semester at the University of Michigan, a large university with enrolment of 26,208 undergraduate students. Data was gathered for all access to the University of Michigan databases through Search Tools and analyzed for undergraduate users. Out of the 26,208 undergraduates enrolled in fall 2009, 42% of them accessed a scholarly database at least once. Contrary to the hypothesis that the proportion of students who used databases would increase with years as their research demands increased<sup>3</sup>. This paper is organized into seven sections; Introduction, Literature Review, Objectives, Methodology, Data Collection and Analysis, Findings and Conclusion. Next section of this paper will be discussing on literature review. Online database is defined as database that connected to a network. The database stores online collection of resources. It can be a collection of journal articles, collection of abstracts, newspaper articles, books, maps or any other online resources collection. Online database is defined as a machine-readable file of organized information with which the user interacts by means of a terminal connected to the computer housing the file<sup>4</sup>. In a simple meaning, online database can be define as large storage that connected to the network that stores collection of online resources including journal articles, collection of abstracts, newspaper articles, books and maps. Information searching can be defined as finding material (usually documents) of unstructured nature (usually text) that satisfies an information need from within large collections (usually stored on computer)<sup>5</sup>. In other words, information searching is a process of finding resources (usually documents) using unstructured nature like text from large collections.

## 2. Literature Review

Search engine is defined as a tool for finding information, especially on the Internet or World Wide Web<sup>6</sup>. Moreover, search engine is described as a computer program that has the capability of searching through large volumes

of text or other data for specified key words and then retuning a list of files or documents where the key words were found<sup>7</sup>. Most of the students, research supervisors and faculty members in the present day are depending on Google search engine as a tool for collecting information on any specific topic of interest<sup>8</sup>. A survey was conducted at Yonsei University in Seoul, Korea and about 233 undergraduates' students were participated and the finding found that search engines, such as Google, Naver and Daum were the most frequently used sources of information where 16.8% students selected search engines as a source to begin a search task compare to digital libraries 4.5%, Google Scholar 7.5% and scholarly online databases 8.3%<sup>9</sup>. It is support with survey reported that 73.6 percent which are 406 out of 552 students stated that their favorite platform to find research resources were Google and Google Scholar when the survey was conducted at Midwestern University<sup>10</sup>. Even though Google and Google Scholar were in same brand, most of the students preferred Google search engine compare to Google Scholar. It is found that Google brand elicited positive emotional responses from the students they observed and interviewed. It is far different with library databases and library web site. Both were selected only by 75 out of 552, which are 13.6 percent of students<sup>11</sup>. Based on the literature review, factors influenced undergraduate students use search engine have been identified and explore. Search engines characteristics hve been identified to be the main factor that incline users to use search engine to find information<sup>12</sup>. The characteristics include response time, relevance, precision, number of results, stability, dead end, etc. These characteristics are the core competences of a search engine, whose purposes are to give users a set of search results according to the given keywords. The capabilities of search engine that can provide the undergraduate students with exact information that they needed in a short response time are one of the factors influence them to use search engine<sup>13</sup>. Furthermore, the relevance answer that search engine can provide to the students is another factor that influence students to use search engine. The search engine characteristics that became factors influenced students to use search engine to find information is presented as follow<sup>12</sup> (Figure 1).

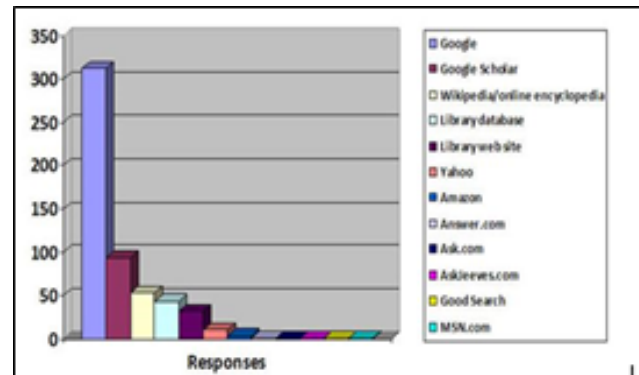
|                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------|
| Response time                                                                                                                  |
| Percentage of advertisements                                                                                                   |
| Use instruction                                                                                                                |
| Consistency of search result presentation                                                                                      |
| Recall                                                                                                                         |
| Relevance                                                                                                                      |
| System stability                                                                                                               |
| Number of results                                                                                                              |
| Diversity of result sources                                                                                                    |
| Validity of links                                                                                                              |
| Accessibility of documentation                                                                                                 |
| Recency                                                                                                                        |
| Search instructions (E.g., Search example)                                                                                     |
| Browse catalogs in addition to search functions                                                                                |
| Ranking                                                                                                                        |
| Multimedia search (E.g., text, image, audio, video, etc.)                                                                      |
| Advanced search                                                                                                                |
| Search tips for improving the search results                                                                                   |
| Readability of search results                                                                                                  |
| Presenting the total number of the search results                                                                              |
| Highlighting the important information of search results by different font, font size, or color (E.g., title, relevance, etc.) |
| Understandability of the summary of search results                                                                             |
| Multi-language search                                                                                                          |

**Figure 1.** Search engine characteristics.

Other than that, the favorite research resources selected by students and eleven factors influenced students to choose research resources as their favorites were highlighted and illustrated below<sup>10</sup> (Figure 2 and 3).

From Figure 2 and 3, the most favorite research resources that selected by students is Google search engine

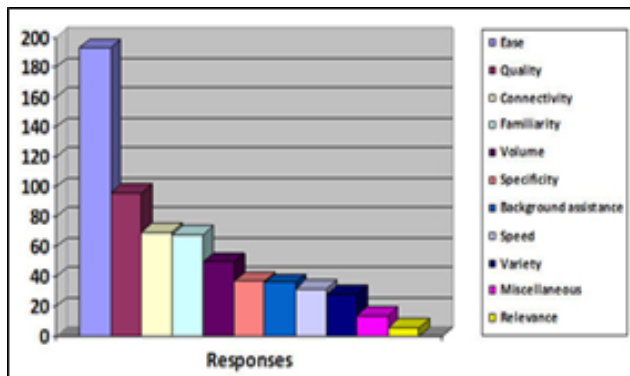
compare to other search engines and online platforms. Factors that influenced student to choose Google search engine as their most favorite research resources is due to the ease of use that Google search engine provided<sup>10</sup>. Moreover, the search engine features also are one of the factor that influenced students to use search engine to find information<sup>9</sup>. The summarization of the selection factors of resource type based on resource features is displayed in details in the Table 1.



**Figure 2.** Research resources students selected as their favorites.

**Table 1.** Selection factor of resource types and resource features

|                        | Dimension: Resource Features |            |                       |               |          |             |            |             |          |             |
|------------------------|------------------------------|------------|-----------------------|---------------|----------|-------------|------------|-------------|----------|-------------|
|                        | Credibility                  | Coverage   | Ease of Understanding | Accessibility | Recency  | Portability | Efficiency | Ease of Use | Language | Free Access |
| Expert & professional  | 5 (20.8%)                    | 0          | 1 (4.2%)              | 0             | 0        | 0           | 0          | 0           | 0        | 0           |
| Professors & lecturers | 3 (2.9%)                     | 2 (1.9%)   | 4 (3.8)               | 0             | 0        | 0           | 0          | 0           | 0        | 0           |
| Libraries              | 1                            | 0          | 0                     | 0             | 0        | 0           | 0          | 0           | 0        | 0           |
| Colleagues & Friends   | 0                            | 2 (1.6%)   | 4 (3.3%)              | 14 (11.4%)    | 0        | 0           | 5 (4.1%)   | 0           | 1 (0.8%) | 0           |
| Search Engines         | 0                            | 32 (17.3%) | 0                     | 22 (11.9%)    | 1 (0.5%) | 0           | 26 (14.1%) | 33 (17.8%)  | 4 (2.2%) | 0           |
| Digital Libraries      | 3 (7.5%)                     | 11 (27.5%) | 0                     | 5 (12.5%)     | 0        | 0           | 3 (7.5%)   | 3 (7.5%)    | 0        | 1 (2.5%)    |
| Scholarly              | 6 (7.4%)                     | 9 (11.1%)  | 0                     | 4 (4.9%)      | 7 (8.6%) | 0           | 6 (7.4%)   | 3 (3.7%)    | 1 (1.2%) | 3 (3.7%)    |
| Online Database        |                              |            |                       |               |          |             |            |             |          |             |
| Google                 | 0                            | 1          | 0                     | 1             | 0        | 0           | 1          | 0           | 1        | 0           |
| Scholar                |                              |            |                       |               |          |             |            |             |          |             |



**Figure 3.** Factors students chose research resources as their favorites.

From Table 1, it shows that search engines hold the highest percentage in term of ease of use with 17.8% compare to other resources types following with coverage 17.3%, efficiency 14.1%, accessibility 11.9%, language 2.2% and regency 0.5%<sup>9</sup>. The search engine features became factors that influenced most of the students use search engine to find information as the search engine can give ease of use to student when they find information, give wider coverage on the specific information that students find, provide greater efficiency and accessibility when students use the search engine, provide multiple languages that easy for students to understand and give quality to the search information.

### 3. Objectives

The objectives of this study were to:

- Explore factors influenced students to use search engines for information searching.
- Illustrate library online database system and features in top research universities and make comparison with search engine.
- Discuss current issues and problems related with library online databases.
- Proposed library online database system that suitable with undergraduate students searching preferences.

### 4. Methodology

Interviews and survey have been conducted at International Islamic University Malaysia. The

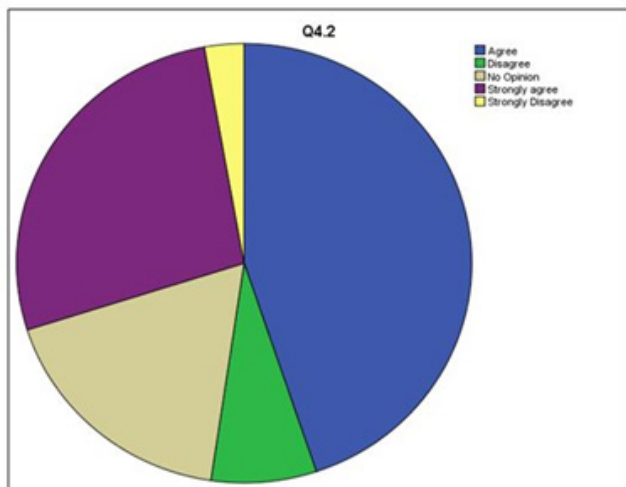
interviewees were librarian; In<sup>11</sup> and his assistant who were responsible in handling International Islamic University Malaysia, IIUM library online databases subscribed by the university. For the survey, there were 107 of participants involved. The questionnaires were in close-ended questions. It was divided into four sections; Demographic Information, System Usability, System Features and User Satisfaction. The questionnaires were adapted from McGill University Student Demographic Survey, Questionnaire for User Interface Satisfaction, QUIS<sup>14</sup>, System Usability Scale, SUS<sup>15</sup> and Computer System Usability Questionnaire, CSUQ<sup>16</sup>. The result from survey and interviews were analyzed to identify current issues and problems and explained in the next section, data collection and analysis.

## 5. Data Collection and Analysis: Interviews and Survey

According to International Islamic University Malaysia, IIUM<sup>11</sup> even though Malaysian government has allocated budget that can cover half of the subscription fees of online databases, due to the decreasing use of the online databases 10 online databases have been unsubscribe by the IIUM. He highlighted most of the students do not use online databases services because they are not aware with the existence, functions and benefit of the services. It is because students are not aware with the services that university provided. Furthermore, he added most of the students do not know how to use library online databases provided by the university. They found it was difficult to use. Other than that, they do not have something urge to use the library online database services since most of resources that undergraduates needed are available not specific in the library online databases. Students would rather stick with their World Wide Web search skills than try to learn new skills needed for searching different scholarly databases. It is happen because there are many obstacles getting to database information<sup>17</sup>. Result from the findings have support the argument. From the survey, it showed that most of the participants found that the website is unnecessary complex. The finding is illustrated in the Table 2 and in the Figure 4.

**Table 2.** Q1: I found that the system unnecessary complex

|                   | Fre-<br>quency | Per-<br>cent | Valid<br>Percent | Cumulative<br>Percent |
|-------------------|----------------|--------------|------------------|-----------------------|
| Agree             | 48             | 44.9         | 44.9             | 44.9                  |
| Disagree          | 8              | 7.5          | 7.5              | 52.3                  |
| No Opinion        | 19             | 17.8         | 17.8             | 70.1                  |
| Strongly Agree    | 29             | 27.1         | 27.1             | 97.2                  |
| Strongly Disagree | 3              | 2.8          | 2.8              | 100                   |
| <b>Total</b>      | <b>107</b>     | <b>100</b>   | <b>100</b>       |                       |

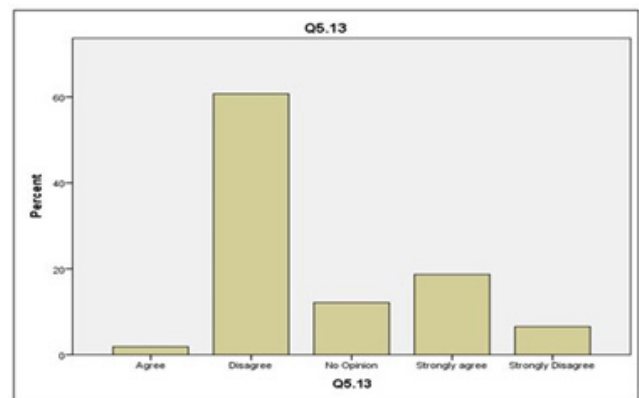
**Figure 4.** Student evaluation: complexity of the system.

44.9% of the respondents agreed that the system was unnecessary complex to use followed by 27.1% of the respondents strongly agreed with the statement. While, 17.8% respondents did not have opinion and only 7.5% respondents were disagreed and 2.8% were strongly disagreed with the statement. Most of the students were having difficulties to find where the direct links for online databases located. They need to click many drops down list buttons in order to find the direct links and it is totally different with the search engine service provided. Furthermore, the information given and database listed in International Islamic University Malaysia, IIUM library web page for library online databases were not arranged in efficient manner. It became one of the factors contributed to the reason most of the students are more interested in using search engine like Google and Yahoo to find information and resources. Other than that, 57% students were disagreed that the system page was simple and attractive to use. While, 34.6% students were strongly agreed, 6.5% students were strongly disagreed and 1.9%

of students did not have opinion. The detail is illustrated in the Table 3 and Figure 3 and 5.

**Table 3.** Q2: the system page is simple and attractive to use

|                   | Fre-<br>quency | Percent      | Valid<br>Percent | Cumulative<br>Percent |
|-------------------|----------------|--------------|------------------|-----------------------|
| Disagree          | 61             | 57.0         | 57.0             | 57.0                  |
| No Opinion        | 2              | 1.9          | 1.9              | 58.9                  |
| Strongly Agree    | 37             | 34.6         | 34.6             | 93.5                  |
| Strongly Disagree | 7              | 6.5          | 6.5              | 100.0                 |
| <b>Total</b>      | <b>107</b>     | <b>100.0</b> | <b>100.0</b>     |                       |

**Figure 5.** Student evaluation: attractive and simple.

The interface of the International Islamic University Malaysia, IIUM library online databases web page is full with information. It is not offer students with ease of use feature like search engine. Search engine like Google, offers students with simple interface that easy to use for information searching purposes. It covers wider coverage including journals, web pages, e-books and all information and not limited within the databases only.

## 6. Data Collection and Analysis: System Review in Top Research Universities

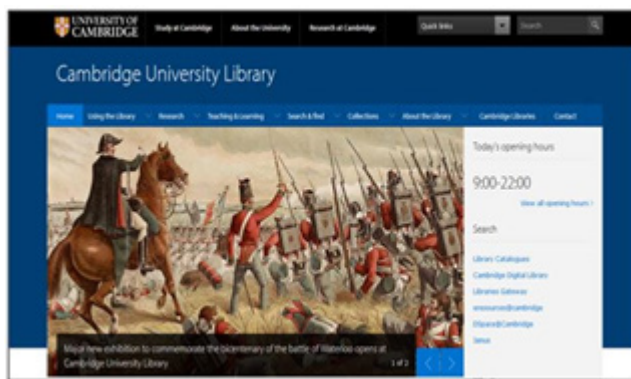
Online databases is a list of multiple databases that library subscribes to numerous networked indexing utilities and full-text data delivery programs. Students can find the direct links to the multiple databases subscribed by the university in the library web page. In addition, students can find research resources or academic information through the databases that have been subscribed by the



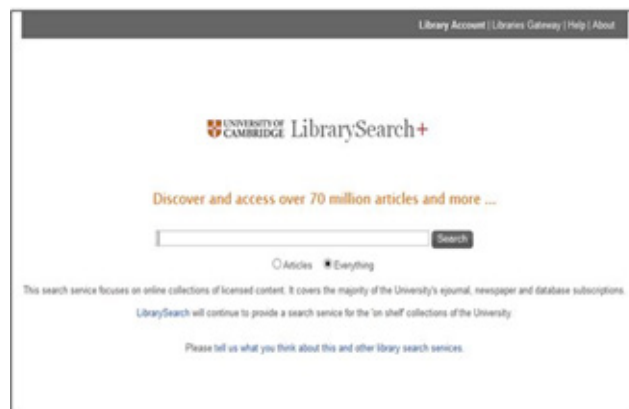
university. The library maintains an extensive collection of electronic research materials and instruments from the multiple databases subscribed that are accessible only through the campus networks. There are more than thousands online databases available nowadays however this study is mainly focus in the context of library online databases. In this section, the list of library online databases that have been subscribed by the top research universities are identified, their library online database systems and features were reviewed. The top research universities were selected and identified based on QS World University Ranking by Subjects in 2014.

## 6.1 University of Cambridge, United Kingdom

University of Cambridge is one of the top research universities in the world. University of Cambridge that located at United Kingdom has listed to be top six ranked in the world for statistics and operational research<sup>18</sup>. Cambridge University Library's collections have grown into one of the world's great libraries with an extraordinary accumulation of books, maps, manuscripts and journals. It covers every conceivable aspect of human endeavor, spanning most of the world's cultural traditions. The library collections including manuscript collections have already been published in print, microfilm and digital formats. The library also provided substantial online resource so that their collections can be much more accessible to students, researchers and the wider public. Up till now, users can search over 70,000 million online licensed contents including University's e-journal, newspapers, articles and databases subscription. Figures below display University of Cambridge Library web page and library search engine<sup>19,20</sup> (Figure 6 and 7).



**Figure 6.** University of Cambridge library web page.



**Figure 7.** University of Cambridge library search engine.

From Figure 6, it displays the interface of University of Cambridge Library webpage. University of Cambridge built web pages special for their library collection including printed resources and online. Their collections are not limited physically in the library but also through online. From Figure 7, it shows that University of Cambridge stores all their collections in one place including e-journals, newspapers, and online databases subscriptions. Their library online database system interface is simple. It is also easy to use for information searching. The system contains search engine, Library Search+ that offers similar function and features like Google search engine. The university resources can be accessed not only by the university students but also other researchers and public users. However, the researchers and public users have to pay fee before they can access the resources. University of Cambridge also offers their students and public users opportunity to access the resources even the resources are not own by the university. However, they have to make payment and request for the resources first. Their library online database system is very efficient and stores millions of online resources that can be access in one place. The university used Falcon and Drupal for their system. It is used to manage all the online resources. Falcon is a Content Management Service that creates individual hosted websites in a managed environment, ready template in the University house style and with a range of functionality already available. It is run by the University Information Services (Computing) built on the Plone platform where Drupal is used by University Information Services (Management Information) to deploy the University's homepage, a few

thousand pages of content that make up the research, news sections along with other core top-level content. A Drupal theme is being developed to cater for additional content areas.

## 6.2 University of Oxford, United Kingdom

University of Oxford is listed to be the top research universities in the world. It listed to be in top 10 ranked in the world stated by QS World University Ranking by Subjects 2014. Oxford meets the needs of its students, academics and the international research community with a wide range of library services provided by more than 100 libraries, making it the largest library system in the UK. There are four main libraries that University of Oxford provided including Bodleian Libraries, The Bodleian Library, College libraries and Oxford University Libraries A-Z. University of Oxford has been recognized as the top research university in the world. The facilities that this university provided for example it provided special library only for research purposes for researchers and students. Other than that, the university provides Search Oxford Libraries Online (SOLO), the main search engine for library collections across Oxford, providing access to information in over 100 Oxford libraries including circa eight million bibliographic records and more than 13 million item records. These include Oxford University Research Archive (ORA), OXLIPI+ (currently over 800 e-resource databases) and OU E-Journals (over 28,000 e-journals). The University of Oxford use OLIS Integrated Library System to manage the libraries. OLIS is the Integrated Library System of the University of Oxford, part of the library catalogues and services provided by the Bodleian Libraries. It contains records for more than 13 million items held by libraries within, or associated with the University. OLIS also provides complex library management services. Library staffs use it for maintaining catalogue records, purchasing books and journals, recording and tracking loans and requests, and registering journal issues. The primary public search interface is SOLO: Search Oxford Libraries Online; OLIS can also be searched within Mobile Oxford and via Z39.50. The Oxford University used Content Management System, Drupal to manage the website, library system and

online resources.

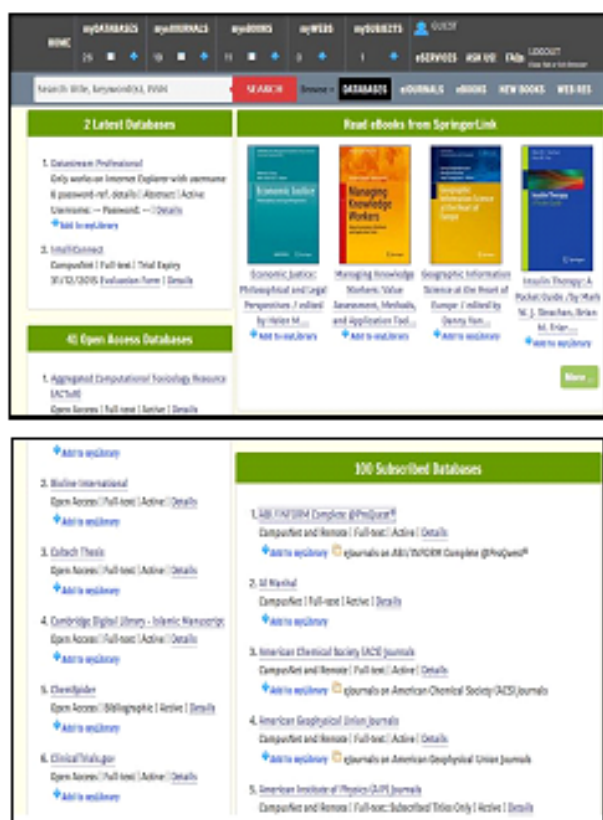
## 6.3 University of Malaya (UM), Malaysia

University of Malaya (UM) is recognized as one of the research universities in Malaysia. The contribution that the university provided in producing high impact factor research that can contribute to economic development in local, state and national level is the main factor on how University of Malaysia is been recognized as one of the research universities. The UM Library has more than 100,000 subject based web links to resources like online databases, e-Journals, e-Books, selected web resources and more, all available in one place. Up till now, UM has subscribed more than 100 online databases, more than 28,000 e-Journals, more than 90,000 e-Books and more than 3,000 selected Web resources. Figure below displays the example of the library online databases that have been subscribed by the UM (Figure 8).



Figure 8. List of online databases subscribed by the UM.

From Figure 8, the example of library online databases that have been subscribed by the university including ProQuest, EBSCOHost, Oxford University Press Journals, GLOBinMED and many more<sup>21</sup>. The university has managed the library online databases in effective manner and it is illustrated in the Figure 9.



**Figure 9.** Screenshot of subscribed databases in UM library web page.

Based on Figure 8 and 9, the library online database system features of UM were captured<sup>21</sup>. The features then were illustrated in term of its accessibility, ease of use,

coverage, efficiency, language and regency. The content management system use to manage the library online databases resources also was identified. From Figure 8 and 9, it shows that the library online database system is easy to use by students; however students need to login first before they can access and use the system. Furthermore, the coverage is limited within the campus area and it can be accessed using internet connection only. Other than that, the library online resources limited within the databases subscribed by the university. Moreover, the system is efficient to use and all the information and online databases subscribed were organized in efficient manner in their library web page. The UM used Content Collaboration Management System, CCM version 2.0 to manage the website, system and their online resources. Their system only uses English as information language. Below in Table 4 is the summarization of library online database system features, content management system, library search engines used and library online databases subscribed by the top research universities.

## 7. Findings

From the analysis (interviews, survey and system review), the best characteristics and features identified and should be adapted for future development of library online database system for International Islamic University Malaysia, IIUM including accessibility, ease of use, coverage, efficiency, language and regency. It is because these features and characteristics found to be the most

**Table 4.** Library online database features, library search engines, CMS and online databases subscribed by top research universities

| Top Research Universities               | Features      |             |            |          |           |         |                            | Library Search Engine               | CMS                                                      |
|-----------------------------------------|---------------|-------------|------------|----------|-----------|---------|----------------------------|-------------------------------------|----------------------------------------------------------|
|                                         | Accessibility | Ease of Use | Efficiency | Coverage | Languages | Regency | No. of Database Subscribed |                                     |                                                          |
| University of Oxford, United Kingdom    | ////          | ////        | ////       | ////     | /         | ///     | >Million                   | Solo Search Oxford Libraries Online | Drupal                                                   |
| University of Cambridge, United Kingdom | ////          | ////        | ////       | ////     | /         | ////    | >Million                   | Library Search+                     | Falcon and Drupal                                        |
| UM, Malaysia                            | //            | ///         | ///        | //       | /         | ///     | >100                       | -                                   | Content Collaboration Management System, CCM version 2.0 |

//// Excellence, /// Good, // Satisfactory, / Poor



essential to be included in the library online database system. As discussed in previous section (system review), these features and characteristics were identified in all top research universities library online database systems. In order for International Islamic University Malaysia, IIUM to eliminate the decreasing of library online database use issue, the university should have a system to manage all online resources.

Currently, International Islamic University Malaysia does not have the system. The library online databases subscribed by the university are arranged and display one by one in the library website. It gives difficulty to students to search the online resources that they want by clicking one by one in the link provided in the library website. It is obviously violated the ease of use feature that offers by the top research universities online database systems. It became the major reason of the decreasing of library online database used each year. Furthermore, International Islamic University Malaysia, IIUM should embed library search engine in the future library online database system. It found that all top research universities have their own library search engine. It gives efficiency for students to find information and online resources. The search engine offers students simple interface and ease to use and it is effective to use for information searching. Other than that, International Islamic University Malaysia, IIUM should choose more suitable content management system to manage the online resources and website. The issue is all the information provided in the IIUM library website is not organized. The interface of the library website also looks dull and not attractive. It is unlikely with top research universities websites and library online database systems. It is because they used Falcon, Drupal and Contain Collaboration Management (CCM) System, CCM version 2.0 to manage their websites and online resources. It is found to be the most suitable content management systems for their websites and systems. Moreover, International Islamic University Malaysia, IIUM needs to wider coverage in term of its online resources. International Islamic University Malaysia, IIUM needs to subscribe more library online databases like top research universities. It is important to increases possibility students get resources that they want and needed from library online databases without getting help from Google search engine. It is also will enhance the recency. The possibility students are provided with the recent and latest information and resources. Up till

now, University of Malaya has subscribed more than half library online databases compare to International Islamic University Malaysia, IIUM. The International Islamic University Malaysia, IIUM also need to adapt accessibility feature in the future system. The online resources should not be access by the IIUM community but also the public users. The language feature will be added as advantage if it is adapt in the future library online database system. Most of the top research universities found not to emphasize and use multiple languages in their system. However, it will be a great feature to be adapted as the popular search engine provided this feature and it is proved to be one of the reason people attracts to use search engine to find information.

## 8. Conclusion

In conclusion, accessibility, efficiency, ease of use, coverage, language and recency features are essential in the library online database system. It should be adapted in future development of library online database system in International Islamic University Malaysia, IIUM. These features have become the factors that attract undergraduates' students use library online databases system and services. Other than that, International Islamic University Malaysia, IIUM needs to apply suitable content management system to manage online resources, manage website and provide user with attractive interface of the system and website. Furthermore, International Islamic University Malaysia, IIUM should embed library search engine in the future library online database system. It is found that all top research universities have their own library search engine. It became the factor that attracts students to use the system for information searching. Other than that, International Islamic University Malaysia, IIUM needs to subscribe more library online databases to encourage students use the future library online database system and eliminate the urge for them to use Google search engine to find information and resources. These findings were believed to be the potential solution that can eliminate the decreasing use of library online database services issues and problems. It is important to bear in mind that if the problems continue to happen, it will affect the research quality when the number of library online databases subscribed decrease each year. The students will have limitation to have references to do researches. The consequence, International Islamic University Malaysia,

IIUM will fall behind from other universities in term of university ranking, research values and contribution for country development. It is surely will give negative image and effects to the International Islamic University Malaysia, IIUM as a whole.

## 9. Acknowledgement

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