# Adding Value to an Abstracting and Indexing System: The Case of MyAIS, Malaysia

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World Digital Libraries 5(1): 19-35

#### **Abstract**

There are problems in (a) identifying the entire scholarly journals published in Malaysia, (b) locating and accessing the journals, (c) knowing who has published what and in which journals; (d) assessing the indexation status of the journals; and the citation received and general impact count of the journals. The Soft Systems Methodology (SSM) is used to frame the study, especially in determining the problem situations, extracting the problems and proposing a solution in rich pictures, initiating the prototype, comparing existing process with those of the proposed system and making improvements from feedback. The prototype MyAIS or Malaysian Abstracting and Indexing System is described, especially the features that adds value to the system and motivate journal publishers and authors to contribute to the system in order to increase availability and accessibility.

Keywords: Indexing, Abstracting, Malaysia, Citations, General impact, Scholarly journals.

### 1. The problems

Online indexes and abstracting services are fast becoming the first choice of libraries because of the added value they provide in giving full access to journals' contents and allowing access remotely, which seems to work well with today's new user generation (Katz, 2002). This leads us to the first problem. While access to these abstracting and indexing services are true for main stream foreign journals, it is not so for most national journals published in developing countries. For these countries, which includes Malaysia, scholarly works published by academic publishers and professional associations remain inaccessible and sadly unused as well as cited. As such, an open access abstracting and indexing system could help solve this problem. This is exactly what MyAIS or the Malaysian Abstracting and Indexing System provides for Malaysian scholarly works.

Also, in Malaysia, it is difficult to estimate with certainty the exact number of scholarly journals in existence. There is no single directory available that provides such a list, and, if there is one, digital born electronic journals very often would be missed (Roosfa, 2006). This applies to both print and electronic scholarly journals in Malaysia. Md Sidin (1997) appended a list of 214 journal titles to a paper presented at a conference, and indicated that 59.3% of the titles were in the Arts, Humanities, Social Sciences and 40.7% were in Science, Technology and Medicine. Normah (1999) reported a total of 284 titles recorded through an ISSN listing issued by the National Library of Malaysia. A more recent journal audit was carried out by Zainab et al. (2012), which reported a total of 464 journal titles, tracked through library catalogues of the National Library of Malaysia (a legal repository) and the University of Malaya Library (the oldest university library in Malaysia). Most Malaysian journals are published in single volumes annually and about a third published twice a year. Knowing what titles exist is extremely important

to estimate just how large is the corpus of Malaysian scholarly journal article publications available for reference to the Malaysian research community, that needs to be covered by a national abstracting and indexing system.

Problem is also faced by Malaysian scholars of knowing which journals are best suited to disseminate research results. It cannot be denied that technology can both empower or exclude people by determining their access to knowledge (Adams, Blandford and Luntm, 2005). Malaysian scholars often do not know what their colleagues have published in their respective fields and therefore seldom cite each other (Science and Technology, 2004). This has resulted in the flow of quality articles out of the country and low submissions to local academic journals. This situation inevitably affects the attempt of Malaysian scholarly journals to sustain their content quality. It is therefore extremely important to provide them with an avenue where they can not only self-archive their issues but also make their articles more visible to the global educational community.

Conversations with editors of academic journals reveal that the editorials are often so bogged down with work with minimal help from support staff, that they have no time to strategize about marketing or improving the status of their journals. They are often unaware of how to gauge the quality of their journals in terms of international standards. To enable publishers to periodically self-assess the status of their journals in terms of quality would be an added bonus for academic publishers so that they could roughly estimate how to alleviate their journals toward an international status. Internationalization is related to the indexation status of Malaysian journals. An indicator which shows that a journal has reached an international status lies in its ability to get itself included in an indexing and abstracting service both at national and international levels. A national indexing system would help spearhead the indexation status by international databases such as Scopus, the ISI

databases and other subject-based indexing services. This article focuses on the initiative to develop a Malaysian abstracting and indexing system or MyAIS for scholarly journals and value added features provided by the system to improve availability, visibility and citability of Malaysian scholarly works. Ultimately, the initiative would contribute to enrich the corpus of Malaysia's scholarly e-content.

### 2. Objectives

The objectives of this initiative are:

i To identify the problems faced by stakeholders (journal publishers, librarians and information professionals, researchers and authors) in locating, accessing and using scholarly journal contents in Malaysia.

ii To find out the status of Malaysian journals in terms of its availability in listings either printed or electronically and their indexation status by Malaysian or international databases.

iii To provide an indexing and abstracting system which empowers journal publishers and individual scholars to archive their journals and scholarly works and at the same time provide access and visibility of contributions over the Internet.

iv To add value to the system by providing citation and impact information for both authors and journals.

### 3. Methodology

The soft approach was used to identify problem situations extracted from discussions reported in literature surrounding the issues of access to Malaysian scholarly works. The soft method approach is found suitable when dealing with problems that are difficult to define, problems that involve social, political and human activity components. The social and educational implications of the situation dealing with the availability, visibility of scholarly journals is suspected. We know the problem exists but it is difficult to pinpoint exactly the extent of

the problem and the possible systems required to alleviate the situation. The soft approach was developed by Checkland (1981, 1998) and Checkland and Scholes (2001), who proposed that all type of problems can be solved using the soft method. The method emphasizes on identifying and expressing problems inherent in any situation, considering the views of stakeholders and proposing a possible solution. This approach helps to vie problems from various angles and ensures that the solution works for all stakeholders involved. Even though the method proposed has seven stages (Figure 1) Checkland informed that one can start at any stage and may even need to combine some stages. In this project, at various stages the data gathering approach used vary, comprising discussions and exchange of ideas at workshops and conferences with journal publishers, writers and librarians as well as information obtained from published literature.

Stages 1 and 2 comprise identifying problems and expressing it in a rich picture using information extracted from discussions and exchange of ideas from these occasions (a) 30 minute presentations and 20 minute discussion each at two scholarly journal publishing workshops and two seminars on the internationalization of Malaysian academic journals attended by academic journal publishers and (b) problems expressed in published literature. Stage 3 will identify the roles and estimate the requirements of stakeholders, in this case the authors/researchers/academicians, the journal publishers and the librarians. The proposed requirements are mapped to the proposed system.

Stage 4 will indicate the proposed conceptual model of the system and Stage 5 will compare the proposed solution with the current problem situations. Stage 6 and 7 comprise actual proposed designs of a prototype and populating the system with sufficient content to simulate the running of the system.

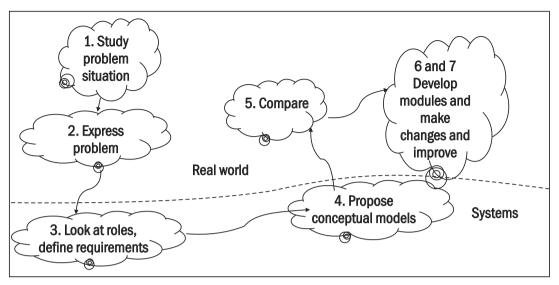


Figure 1 The Soft System Map

### 4. The results of the soft approach

## 4.1. Stages 1 and 2: Problems identified and expressed

Stages 1 and 2 entail finding out the problems from three groups of stakeholders, the journal publishers and editorials, the librarians and information professionals, and Malaysian researchers and academicians.

## (a) Problems expressed by publishers and editorials

The problems expressed by journal publishers and editors are extracted from dialogues and exchanges of ideas during two workshops on scholarly journal publishing (*Workshop on the Editorial Proses*, February 2009; *Workshop on Managing Scholarly Journals*, 13 -16 January 2008) and two conferences on internationalization of Malaysian scholarly journals (*Regional conference on Scholarly Journals*, March 2006 and *National Conference on Scholarly Publishing*, April 2009). In the two workshops, the author conducted two 30 minute sessions with academic publishers

where during and after the talk editors voiced their constraints and limitations experienced when publishing their journals. Problems are also identified from two conferences where, after the author's presentation, the editors from the floor voiced their problems and opinions. Out of these venues a number of problem issues were extracted. This is indicated in Figure 2. In summary, journal editors are facing poor submission problems and this makes it difficult for them to maintain frequency punctuality. Very few get financial help to enable them to engage support personnel to help manage the journals. Also, very few journal editors are aware of their role in getting their journals indexed by an abstracting and indexing database both nationally or internationally as a strategy to improve their visibility. As a result, many of the journals were either institutional or faculty based where in most cases the articles were mainly submissions from academics of the same institutions and faculties. They were also unaware of the process of getting their journals indexed either by the ISIS databases, Scopus, or other discipline-based databases. Very few provide an electronic version of their journals. As a result, the publishers have little idea of the total number of scholarly journals published, who are publishing what and who are citing the articles. The publishers expressed willingness to contribute to the system to ensure their journals are indexed and to increase their visibility globally.

## (b) Problems expressed by librarians and researchers in literature

Problems in determining the corpus of Malaysian scholarly journals are abstracted from published literature. Md Sidin (1997) and Roosfa (2006) both indicated this problem. Currently, no comprehensive listing of scholarly Malaysian journals can be located. The two listings compiled by the Malaysian National Library

are outdated (Senarai induk terbitan bersiri = Malaysian union list of serials, 1976; Indeks majalah Malaysia = Malaysian periodical index, 1973 - 1990). MyULIS or Malaysian Union list of serials compiled and published by PERPUN or The Conference of Academic Librarians and the National Library covers total serials holdings including those published outside Malaysia and no separate Malaysian journal listing is given (MyULIS, 2008). Roosfa (2006) provided a listing in 2006 and mentioned the elusive and mushrooming journal titles from the newer universities as well as those published solely in the electronic form. All these situations indicate that there is no single current list of Malaysian journals and this poses a problem not only to

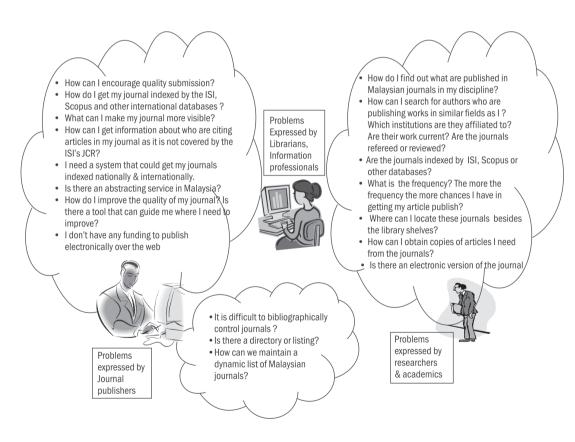


Figure 2 The Problems Expressed by Stakeholders

librarians to keep track but also researchers and authors to support their referencing needs. This is excerbated by the lack of a national indexing and abstracting services which should cover these scholarly journals as the indexing initiative carried out by the National Library of Malaysia have ceased (Indeks majalah Malaysia = Malaysian periodical index, 1973 -1990) and moreover no abstracts and citation information was provided by this index. Zainab (1997) who studied the indexation status of Malaysian scholarly journals in 23 indexing and abstracting services, which represented the major disciplines, found that at that time only 54 Malaysian journals were indexed by subject-based international databases. Out of this number 43 were in the STM and 11 titles were in the AHSS. A more recent study indicated that there are currently 49 Malaysian journals indexed by Scopus and 9 titles by Thomson Reuters, Web of Science (Abu Bakar, et al., 2009; Zainab et al. 2012). These situations revealed that the total coverage of Malaysian journals in international indexes was very small and the contents of the majority of Malaysian journals remain inaccessible and invisible. Stages 1 and 2 of the SSM provide answers to objectives 1 and 2 of the study.

## 4.2 Stage 3: Roles and determining requirements

This stage involves identifying the needs and roles of stakeholders, in this case the authors, researchers, the journal publishers and the librarian and environment where the problem is situated as well as the underlying criteria of the proposed system. Their roles are determined and a conceptual model of how the situation can be improved is proposed (Table 1).

## 4.3 Stage 4: Proposed conceptual models

Funding is an important issue in this context. The initial amount of fund received was too small to contract the development of the

proposed solution from scratch. As a result, the initiative proposed the adoption of an open software which can be customised to support the requirements. The software should also support an open access architecture and is Open Archive Initiative (OAI) compliant because (a) this is encouraged by the Malaysian government; (b) it will easily allow search engines to harvest the systems metadata; and c) will increase the accessibility and visibility of Malaysian articles on the Web. The E-print software from Southampton University was chosen and customized to support the requirements of MyAIS. This software provides an efficient and dynamic indexing system that returns fast feedback when querying its 'browse and search' modules. The repository function of the system is enhanced and added in value through a statistics module which provides citation counts, impact scores, h index, viewing and download information. It is this statistic features that would hopefully motivate journal publishers to contribute, to make their presence visible, and to obtain citation counts for their journals as well as assess the general impact of their journal at least nationally. The conceptual models which would help improve the situation is indicated in Figure 3 and the main concepts are as follows:

- The people involved and the support for empowerment: The system allows publishers/ authors/ librarians to self-archive their own articles/journals and hence ensuring an archive collection is available on an alternative site. This will sustain their journal's availability and visibility in the long run. The system should be able to provide a dynamic masterlist of Malaysian scholarly journals.
- The Process: The system should provide information about the number of article citations /views/ downloads. The system should also be able to extract from the articles' contents and provide the information about 1) the citation count for authors (number of articles citing an author's work); 2) the number of citations obtained by journals available

| Table 1 | What the | Proposed S | System | should | Support |
|---------|----------|------------|--------|--------|---------|
|---------|----------|------------|--------|--------|---------|

| Current Roles  | Requirements Extracted for Future Roles  |
|--|--|
| (1) Editors: 'Publishers' current roles: Manage publication process; ensure punctuality of publication; maintain publication style, distribute issues to libraries, individuals and bookshops.   | <ul> <li>Manage editorial and publishing process electronically.</li> <li>Fast and easy publication delivery process and shorter submission to publication and delivery stage.</li> <li>Able to handle scanned images of journal articles.</li> <li>Easy and intuitive interface and instructions for non-technical personnel.</li> <li>Able to control access - determine which issues are freely accessible and which issues or articles are not.</li> <li>Would not incur cost and time in maintaining and monitoring the system</li> <li>Support uploads from back issues as well as current (an archival repository)</li> <li>Able to provide bibliographic and citation information to the global learning community.</li> <li>Able to handle storage, protection, preservation problems of their journals.</li> <li>Able to know who are citing articles published in Malaysian journals and the national impact of their journal.</li> </ul> |
| (2) Authors and researchers Current role: Submit articles by mail or email attached files to editors; priority given for sending articles abroad because local titles could not be easily located and irregularly published; visit the library to browse and search for required articles. | <ul> <li>Able to submit and archive their own published or unpublished works.</li> <li>Able to know their total works available in the system instantaneously.</li> <li>Make known their works to Malaysian and foreign researchers in the same field.</li> <li>Able to know who are citing their works.</li> <li>Able to browse and search for who else and in which journals their peers are publishing in Malaysian publications.</li> <li>Able to access works published in local scholarly journals and cite relevant works.</li> <li>Able to get their works in an indexing and abstracting system and disseminate their works over the web, at least accessible in Google Scholar.</li> <li>Able to determine which of their works are open for access and which are close for access.</li> </ul>   |
| (3) Librarians and Information Centre Managers Current roles: Compile listings of journals upon request; compile indexes without abstracts or full-text.   | <ul> <li>Able to determine the status of Malaysian scholarly journals (their number and bibliographic details).</li> <li>Able to update current journal information so that the scholarly journal listing becomes dynamic.</li> <li>Empowered to upload, index, and abstract own institutional journals with the option to provide full-text access to published articles (institutional repository).</li> <li>Empowered to archive their institutional journals even those which have ceased publication.</li> <li>Able to edit, delete their own records entries.</li> <li>Efficiently handle multi-collections in a union digital library.</li> </ul>   |
| (4) Systems Administrators Current roles: Not available in the current role.   | <ul> <li>Create, edit, delete new editors and users.</li> <li>Able to administer and troubleshoot access problems on site and remotely</li> <li>Support metadata fields for different types of information resource.</li> </ul>  |

within the system and this will allow for a rough calculation of each journal's general impact factor and h index; and 3) the number of articles that an author has published in national journals. The system will be populated with sufficient number of contents to simulate the various functions of modules in the system. The target is around 7,000 articles from Malaysian journals. Also, the system should be able to provide added information about the traffic of usage and users.

 Quality assessment: The system should be able to provide journal publisher with a selfassessment journal quality tool to gauge the status of their journals. This is also an add-on feature.

#### 4.4. Stage 5: Compare stage 4 and 2

Table 2 compares the current problematic situations with the proposed solution (comparisons between stages 4 and 2).

## 4.5. Stage 6 and 7: Developing modules and initiate improvements

Stages 6 and 7 involve detailing the features of the proposed system. MyAIS currently holds over 12,000 articles abstracts and full-text documents since its inception in early 2007. The articles are published in a few Malaysian journals and local conference proceedings. Details of the proposed system Client/User modules is given in Table 3 and the Administrators module is given in Table 4. Stages 3 to 7 provides answers to objectives 3 and 4 of the study.

### 5. The project outcome

#### 5.1 Empowering stakeholders

The project outcome is an open access solution named MyAIS (Malaysian Indexing and Abstracting System). It was developed to support a national repository for Malaysian scholarly

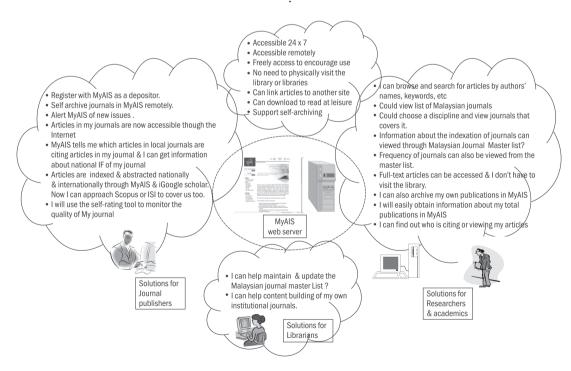


Figure 3 The Rich Picture of the Proposed Solution

| Table 2 Current Situations and the Proposed So   | olution   |
|--|---|
| Current Problem Situations   | Proposed Solutions  |
| <ol> <li>Journal Publishers / Editorials</li> <li>Low quality submissions</li> <li>Not indexed nationally and internationally</li> <li>Not easily accessible and visible</li> <li>Not aware who are citing articles published in journals</li> <li>None access to an indexing and abstracting system locally to request for coverage</li> <li>Not aware of the journal's impact and quality</li> <li>No funding for support of electronic publishing.</li> <li>No technical know-how on how to publish electronically</li> </ol> | <ol> <li>MyAIS</li> <li>Indexed nationally and internationally when contributing content. MyAIS is an open access OAI compliant system accessible through the internet and indexed by Google Scholar</li> <li>Increase accessibility and visibility. Accessibility is one of the criteria used by indexing agencies such as Scopus and ISI databases when reviewing indexation requests</li> <li>Gives citation counts for both authors' works and journals</li> <li>Free use of the MyAIS system to support journal archiving and current publications</li> <li>Provide self-assessment journal quality tool to estimate the current quality of a journal</li> <li>Allow publishers to publish and archive their journals without having the technical know-how on how to maintain the system</li> </ol> |
| <ol> <li>Librarians / Information Professionals</li> <li>Could not effectively control scholarly journals bibliographically</li> <li>There is no national directory of Malaysian scholarly journals</li> <li>The listings compiled by individuals and institutions tend to be outdated</li> </ol>  | <ul> <li>MyAIS</li> <li>1. A dynamic listing that can add, edit, delete journals titles and the information is available to users immediately</li> <li>2. The listing is only on Malaysian journals even though authors may archive their works published in other non-Malaysian journals</li> </ul>  |
| Researchers / Academicians (Users)   | MyAIS   |
| <ol> <li>Do not know how to search for peers<br/>publishing in the discipline in local journals</li> <li>Do not know who is publishing what and</li> </ol>   | <ol> <li>Users can browse and locate articles by authors' names,<br/>keywords, institutions, year, journal title, and format</li> <li>Users can view information about the citation and</li> </ol>  |
| where in local journals  3. Difficult to access local journals  4. Difficult to know the indexation status of the journals.  | <ul><li>impact factor of their works</li><li>3. Users can know total viewing, downloads, and citation of their works</li><li>4. Users can self-archive their works which will be made</li></ul>   |
| <ul><li>5. Cannot determine whether the journals located are still current</li><li>6. Is there an electronic version of local</li></ul>  | <ul><li>accessible nationally and internationally over the web and google scholar.</li><li>5. Can decide which of their works can be given full access</li></ul>  |
| journals in my subject area?   | and which can be denied access to full-text   |

Table 3 Client /User Modules for MyAIS

| Modules             | Menu Item   | Sub-Menu Item                                  | Description  |
|---------------------|---|--|--|
| General Information | Home (Return<br>to the main<br>page)<br>About MyAis |  | Returns to the default page of MyAIS. Client views general description and identify number of items indexed and number of full-text uploaded into the system  Background  Objectives of the research  Work Teams  Funding  Contact information |
| Search Engine       | Word Search   | Author search                                  | Indicate quantity and lists works by an author's name – most recent first  |
|                     |   | Subject search                                 | Lists Works by a subject chronologically – most recent first   |
|                     |   | Keywords                                       | Lists works by a keyword chronologically - most recent first   |
|                     | Citing search                                       | Author citing                                  | Lists works that cite the author, includes self-citation   |
|                     | Advance<br>Search                                   | Specific field or<br>Combined fields<br>search | Options to search full-text, title, creators, abstract, keywords, subject (controlled), item type, department, editors, status, references, journal titles, date, and specify order of listing (most recent, oldest first, author, title).     |
| Browse Options      | Browse  | By Author, Editor                              | Lists Authors' and editors' names, number of items indexed is indicated  |
|                     |   | Author by Alphabet                             | Lists alphabet A-Z   |
|                     |   | By Journal                                     | Lists journal titles A-Z, number of items indexed is indicated   |
|                     |   | By Subject                                     | Lists LC broad subject categories, number of items in each category is indicated   |
|                     |   | By Affiliation                                 | Lists affiliations A-Z, number of items indexed under each affiliation is provided   |
|                     |   | Malaysian Journals                             | Journal Master list Directory  |
|                     |   | Ву Туре  | Lists types of items, journals, conferences, books, book chapters, thesis, and monographs. Number of items indexed under each type is provided.  |
|                     |   | By Year  | Lists years, number of items indexed under each year is provided.  |
|                     |   | By Latest Addition                             | List items of three days back  |
| Browse Statistics   | Browse  | Author Statistics                              | Total articles, total downloads, total views, total citations received   |
|                     |   | Top 20 Authors                                 | Rank, authors' names, total views, and downloads   |
|                     |   | Top 20 Articles                                | Rank, titles, total views, and downloads   |
|                     |   | Top 20 Journals                                | Ranked journal titles, total citations received  |
|                     |   | 10p 20 10umais                                 | named journal dides, total citations leceive   |

Table 3 Contd..

|                 |           | Top 20 Cited                     | Rank, titles of articles, total citations received   |
|-----------------|-----------|----------------------------------|--|
|                 |           | Top 20 Authors<br>Cited          | Rank, authors' names, total citations received   |
|                 |           | Journal Statistics               | Total cites, total articles, H index, 5 year impact, 2 year impact, Immediacy Index, cited half life, RM index |
|                 |           | Usage Statistics                 | Daily, monthly usage statistics, total visits, pages, sites, total URLs, top countries accessing               |
| Registered User | Register  |                                  | Register in order to deposit items   |
|                 | User area | Manage deposits - new items      | Specify item type, upload item, input item details, specify item subjects, save items, send items for review   |
|                 |           | Manage deposit -<br>import items | Upload imported record, test run imports, send items for review  |
|                 | Login     |                                  | Enables user to login as a registered member   |
|                 | Logout    |                                  | Enables user to logout as a registered member  |

 Table 4
 Administrator's Module (System Administrator, Systems editors)

| Modules         | Menu Items                | Description   |
|-----------------|---------------------------|---|
| Administrator   | Status                    | Monitor status information for this server  |
|                 | Search items              | Search for items in the repository to effect amendments   |
|                 | Search users              | Search for users of the repository  |
|                 | Search history            | Search for activities that has occurred on items in the repository  |
|                 | Extra admin               | May add extra admin menu, example journal authority name  |
|                 | Create user               | Create new user account   |
|                 | Stops indexer             | Stops full-text indexer   |
|                 | Edit subject              | Edit, delete subject tree (s)   |
| Review          | Review                    | View, edit, save submissions from depositors for review   |
| Saved searches  | Saved searches            | View saved searches and request to receive periodic email updates, if anything in the search changes.   |
| Profile         | Modify profile            | Edit account information  |
|                 | Saved searches            | View and configure saved searches   |
|                 | User history              | View all changes to items caused by a user  |
|                 | Administrators<br>Account | Change username and user type   |
|                 | Delete user               | Remove user from the system   |
| Manage Deposits | New items                 | Specify item type, upload item, input item details, specify item subjects, save items, send items for review, save items to live archive, send items to retire. |
|                 | Import item               | Cut and paste, upload imported record, test run imports, save items to live archive, send items to retire.  |
| Access          | Login                     | Assists administrator to log in   |
|                 | Logout                    | Enables administrator to log out  |

journal contents. It is a national rather than an institutional repository. MyAIS is an open access system for abstracts and indexes of articles focusing on those published in referred scholarly Malaysian journals and conferences (Figure 4).

The system provides the following information:

- Bibliographic information about articles published in Malaysian scholarly journals (include information such as title, author, affiliation, contact information, abstract, keywords, references listed at the end of each article to generate the citation count).
- Supports full-text uploads by publishers and authors who wish to archive and share works and journal contents with other users.
- Supports dynamic links to full-text articles residing in other repository, websites or portals as well as supports dynamic links to other related articles available within the system.
- Lists publication total by any authors' names, affiliations, format, and by journals.
- Lists articles published in each journals arranged by year.

- Provide a master list of scholarly journals published in Malaysia regardless of whether they are indexed or not in MyAIS
- Provide the total number of views, downloads and citations obtained by an author, an article and a journal covered by the system.
- Provide the total number of citations and general impact factor score received by Malaysian journals included in the system.
- Provide statistical information about total usage of the system, by month and from which country.

It is expected that the data would be richer and more meaningful when all articles published in scholarly journals or in Malaysia are included in the system. MyAIS has empowered stakeholders to locate, access, and use scholarly journal contents in Malaysia.

## 5.2. Bibliographic control of Malaysian scholarly journals

MyAIS supports a small module that allows repository administrators or any assigned



Figure 4 Home Page of MyAIS.http://myais.fsktm.um.edu.my

librarian to update, edit or delete the journal masterlist of Malaysian scholarly journals under the module 'Malaysian Journals' (Figure 5). Currently, a total 464 scholarly journals are listed and this list can be updated and viewed instantly.

#### 5.3. Access and visibility over the internet

MyAIS provides not only an indexing and abstracting service but also offers full-text access to scholarly articles in journals published in Malaysia or abroad in two ways. Firstly, through dynamic links to full text that resides in other digital collections and secondly through voluntary uploads by publishers,

editors, and authors. An increasing number of editors or scholarly journals have requested for indexation. This is a non-profit making project that attempts to serve Malaysian educational and research community with information about what is published in Malaysian referred journals for each year and in various disciplines. In other words, it empowers users by allowing them to contribute contents and access to fulltext articles. These features of providing access and successfully making its contents indexed by Google scholar seems to motivate journal publishers to participate in the initiative, especially those in medicine and related fields. Another motivating feature is the provision of statistical information such top authors,



Malaysian Abstracting and Indexing System

### **Masterlist of Malaysian Journals**

Author, Subjects, Keywords Cited Author

#### **BROWSE**

- » By Author
- » By Journal
- » By Subjects
- » By Affiliations
- » Malaysian Journals
- » By Type
- » By Year
- » By Latest Additions

#### **STATISTICS**

- » By Author
- » Top Authors
- » Top Article » Top Journal Cited
- » Top Article Cited
- » Top Cited Author
- » Journal Citation Statistics
- » Usage Since Sept 2007

1. 3L The Southeast Asian Journal of English Language Studies

Universiti Kebangsaan Malaysia. School of Language Studies and Linguistics ISSN:01285157 (Biannual. Vol.1, 1991-) (.Hybrid. http://www.ukm.my/ppbl/3L/3LHome.html. 1991-2008: 3L Journal o Language Teaching, Linguistics and Literature.) Indexation status: MvAIS

2. ABU Technical Review

Asian Broadcasting Unions Communication

ISSN:0126-6209 (6 times a year, Jan, Mar, May, Jul, Sept, Nov. 1987-) (STM, Print)

Indexation status: Inspec, Scopus

3. Accacmadia Journal

Institut Teknologi Mara, School of Accountancy

ISSN:0126-9577 (2-4 times a year. Vol.1,1975 - ) (SS. Print)

4. AFKAR Journal of Agidah and Islamic Thought

University of Malaya. Academy of Islamic Studies. Department of Aqidah and Islamic Thought

ISSN:1511-8819. (Annual, Vol.1, 2000 - E-version: http://bakkdev.um.edu.my/myjurnal/public/browse-journal-view.php id=186) (Religion, Hybrid.)

Indexation status: MyAIS, Google Scholar

5. Akademika Journal

Universiti Kebangsaan Malaysia Publisher

ISSN:01265008 (Tri-annual, Vol.1, 1972 -) (Science, Hybrid. http://www.ukm.my/penerbit/jademik.html)

Indexation status: Index Islamicus, CSA Sociological Abstract, MyAIS

6. Al-Bayan Journal of Al-Quran & al-Hadith

University of Malaya, Academy of Islamic Studies, Department of al-Quran & al-Hadith

ISSN:1394-3723. (Bi-annual, Vol.1, 2003 -) (Religion, Hybrid, http://bakkdev.um.edu.my/myjurnal/public/browse-journal view.php?id=165)

Indexation status: MyAIS, Google Scholar

7. Al-Jazari International Journal of Civil Engineering

Universiti Teknologi MARA

ISSN:1823-7681 (Annual. 2006 -) (Engineering. Print)

8. Al-Mizan: Jurnal Sekolah Pengajian Islam

ISSN:1675-1523 (Annual, Bil. 1, 2002- ) (Religion, Print)

Figure 5 Printscreen of the Module Malaysian Journals

top articles, top journal views/downloads, top journals cite, and journal as well as author citation counts. Figure 6 indicates the usage statistics of MyAIS which shows an increasing number of users accessing MyAIS for the past 12 months. This means that there is equal chance for any article indexed by MyAIS to be picked up by researchers that could be used or cited.

## 5.4. Adding value by giving citation counts for authors and journals

MyAIS adds value to submissions by providing citation information for authors as well as for journals.

Figure 7 indicates a print screen of a search under author 'Abrizah'. The results show citations received by Abrizah and the highlighted records are self citations. A summary count of the citations received is displayed at the top of the display list. In Figure 8 display of the results under 'top journal cited' is given, listing the journals by the number of citations received. Figure 9 shows an example of the sub-module

'Journal Citation Statistics'. Under this option, results can be ordered by the 2 year impact factor, h- index and RM (relative measure) Index, which is an index specifically formulated under this research to evaluate Malaysian journals.

#### 6. Conclusion

There are numerous open source software available for different purposes (pre-prints, journals, theses, government publications) that can be plucked, enhanced, and used. The e-print is an example of an open software. This type of open source software have changed scholarship and the scholarly communication process. The spirit supported by the open systems are voluntary contributions and the mutual sharing of resources. In the field of medicine, physics and chemistry open systems are welcomed. In Malaysia, many still regard the idea with caution. They are unnecessarily worried about copyright issues and this has resulted in Malaysia lagging behind in the open : systems initiatives. An open system means

| Summary by Month |        |        |       |        |       |                |        |          |          |          |
|------------------|--------|--------|-------|--------|-------|----------------|--------|----------|----------|----------|
| Month            |        | Daily  | Avg   |        |       | Monthly Totals |        |          |          |          |
| Month            | Hits   | Files  | Pages | Visits | Sites | KBytes         | Visits | Pages    | Files    | Hits     |
| Jan 2012         | 33134  | 30536  | 13101 | 2805   | 16498 | 54680318       | 86977  | 406156   | 946642   | 1027156  |
| Dec 2011         | 36366  | 32143  | 11595 | 2407   | 18195 | 125963825      | 74642  | 359469   | 996443   | 1127365  |
| Nov 2011         | 47957  | 42846  | 14999 | 2785   | 19348 | 152026063      | 80776  | 434983   | 1242540  | 1390776  |
| Oct 2011         | 54769  | 48860  | 17657 | 2737   | 22472 | 72122609       | 84852  | 547390   | 1514677  | 1697862  |
| Sep 2011         | 47466  | 41758  | 16089 | 2134   | 18385 | 68089060       | 64023  | 482683   | 1252755  | 1424008  |
| Aug 2011         | 45413  | 40894  | 18580 | 1963   | 18092 | 53347110       | 58904  | 557420   | 1226823  | 1362395  |
| Jul 2011         | 43928  | 38712  | 15440 | 2769   | 20680 | 81367966       | 85852  | 478659   | 1200089  | 1361788  |
| Jun 2011         | 44895  | 39872  | 20692 | 2435   | 18409 | 66534609       | 73067  | 620777   | 1196162  | 1346869  |
| May 2011         | 123911 | 115147 | 93365 | 3930   | 22751 | 97403284       | 121846 | 2894331  | 3569574  | 3841245  |
| Apr 2011         | 111565 | 102228 | 72972 | 4690   | 17325 | 68670528       | 75048  | 1167552  | 1635658  | 1785054  |
| Mar 2011         | 46126  | 42539  | 29777 | 1521   | 7773  | 21367217       | 22818  | 446669   | 638085   | 691899   |
| Feb 2011         | 118396 | 110466 | 80619 | 3428   | 23781 | 103387847      | 95998  | 2257344  | 3093068  | 3315095  |
| Totals           |        |        |       |        |       | 964960436      | 924803 | 10653433 | 18512516 | 20371512 |

Figure 6 Usage Statistics of MyAIS for the Past 12 Months

#### Malaysian Abstracting and Indexing System

Number of items: 29.

Number of Self-Citations: 12.

### Search result for: abrizah

#### Artick

Abrizah Abdullah, (2007) Eliciting user needs in architecting a collaborative digital library using Zachman approach, PhD thesis, Faculty of Computer Science & Information Technology, University of Malaya.

Abrizah Abdullah, (2007) Applying the Zachman Framework Data Dimension to Determine Content of a Dipital Library. In: International Conference on Libraries, Information and Society, ICOLIS 2007, 26-27 June 2007, Armada Hotel, Petaling Jaya, Malaysia. ISBN 9789834349103.

Biswas, Bidhan Ch, and Roy, Amit, and Sen, B.K., (2007) *Economic Botany: A Bibliometric Study*. Malaysian Journal of Library & Information Science, 12 (1). pp. 23-33. ISSN 1394-6234

Huzaimah Abdul Rani, and Zainab A.N., (2006) Gauging the Use of and Satisfaction with Home Grown Electronic Journals: A Malaysian Case Study. Malaysian Journal of Library & Information Science, 11 (2). pp. 105-120. ISSN 1394-6234

Norhazwani Yazit, and Zainab A.N., (2007) Malaysian Publication Contributions to the Field of Library and Information Science. In: Building An Information Society For All: Proceedings of the International Conference on Libraries, Information and Society, ICOLIS 2007, 26-27 June 2007, Armada Hotel, Petaling Jaya, Malaysia. ISBN 9789834349103.

Abrizah Abdullah, and Maizatul Akmar Ismail, and Zainab A.N., (2004) Improving Access to K-12 Local Historical Resources Through a Collaborative digital library. In: International Association for the Study of Cooperation in Education (IASCE), 21-25 June 2004, Singapore.

Esseh, Samuel Smith and Willinsky, John (2006) Strengthening Scholarly Publishing in Africa: Assessing the Potential of Online Systems. In: Workshop on Online Scholarly Journal Publishing, 2006, Africa.

Figure 7 Citation Received by an Author

MYAIS

WY CITE

alaysian citation index

Author Subjects Keynwords

Login | Creace Account

Malaysian Abstracting and Indexing System

### **Top Journal Cited**

| Search  |
|---|
| Cited Author<br>Search  |
| BROWSE  » By Author » By Journal » By Subjects » By Affiliations » Malaysian Journals » By Type » By Year » By Latest Additions |
| **STATISTICS  ***By Author*  ***Top Authors   |
| <ul> <li>» Top Article</li> <li>» Top Journal Cited</li> <li>» Top Article Cited</li> <li>» Top Cited Author</li> </ul>         |
| » Journal Citation Statistics<br>» Usage Since Sept 2007  |
|   |

| Rank | Jounal  | Total<br>Cited |
|------|---|----------------|
| 1    | Medical Journal of Malaysia                                   | 541            |
| 2    | Malaysian Journal of Library & Information Science            | 174            |
| 3    | Malaysian Journal of Nutrition                                | 131            |
| 4    | Malayan Law Journal   | 94             |
| 5    | Journal of Occupational Safety & Health                       | 87             |
| 6    | Malayan Forest Record   | 86             |
| 7    | Jurnal Syariah  | 83             |
| 8    | Malaysian Journal of Science                                  | 73             |
| 9    | Journal of the Malaysian Branch of the Royal Asiatic Society  | 70             |
| 10   | Malayan Nature Journal  | 70             |
| 11   | Malaysian Journal of Pathology                                | 70             |
| 12   | Journal Geographica   | 42             |
| 13   | International Journal of Mechanical and Materials Engineering | 40             |
| 14   | Malaysian Journal of Psychiatry                               | 39             |
| 15   | Tropical Life Sciences Research                               | 37             |
| 16   | Matematika  | 29             |
| 17   | Jurnal Fizik Malaysia   | 27             |
| 18   | Malaysian Journal of Analytical Sciences                      | 26             |
| 19   | Malaysian Journal of Computer Science                         | 26             |
| 20   | Analisis: Jurnal Universiti Utara Malaysia                    | 23             |
| 21   | Bulletin of the Malaysian Mathematical Sciences Society       | 23             |
| 22   | Jurnal Dewan Bahasa   | 23             |
| 23   | Malaysian Journal of Medical Sciences                         | 23             |

Figure 8 Results Displayed under "Top Journal Cited"

| This list Generation w | vas started on :Tue | Jan 31 0:07:36 2012 MYT |
|------------------------|---------------------|-------------------------|
|------------------------|---------------------|-------------------------|

| Num | Journal   |     | Total<br>Articles | H-<br>Index | 5 Year<br>Impact<br>Factor |    | Publications<br>for (2009<br>and 2010) | Impact<br>Factor<br>(2011) | Immediacy<br>Index | Cited<br>Half-<br>Life | RM<br>Index |
|-----|---|-----|-------------------|-------------|----------------------------|----|--|----------------------------|--------------------|------------------------|-------------|
| 1   | Malaysian<br>Journal of<br>Library &<br>Information<br>Science            | 174 | 247               | 4           | 1.35                       | 71 | 46                                     | 1.54                       | 0.40               | 10.00                  | 5.55        |
| 2   | Jurnal<br>Pendidikan  | 13  | 163               | 2           | 0.55                       | 13 | 11                                     | 1.18                       | 0.00               | 1.00                   | 2.31        |
| 3   | Jurnal Syariah  | 83  | 199               | 4           | 0.60                       | 57 | 52                                     | 1.10                       | 0.00               | 5.50                   | 3.03        |
| 4   | Malaysian<br>Journal of<br>Psychiatry                                     | 39  | 151               | 2           | 0.15                       | 8  | 12                                     | 0.67                       | 0.00               | 13.00                  | 1.75        |
| 5   | Medical<br>Journal of<br>Malaysia   | 541 | 866               | 7           | 0.41                       | 74 | 133                                    | 0.56                       | 0.00               | 7.00                   | 2.88        |
| 6   | Journal of<br>Tropical<br>Forest<br>Science                               | 21  | 477               | 3           | 0.49                       | 21 | 45                                     | 0.47                       | 0.00               | 18.50                  | 2.62        |
| 7   | Sains<br>Malaysiana   | 19  | 417               | 2           | 0.26                       | 19 | 58                                     | 0.33                       | 0.00               | 1.00                   | 0.78        |
| 8   | International<br>Journal of<br>Mechanical<br>and Materials<br>Engineering | 40  | 150               | 2           | 0.19                       | 27 | 89                                     | 0.30                       | 1.50               | 1.00                   | 2.43        |
| 9   | Malaysian<br>Journal of<br>Science  | 73  | 460               | 2           | 0.19                       | 17 | 61                                     | 0.28                       | 0.33               | 0.00                   | 0.95        |
| 10  | Malaysian<br>Journal of Civil<br>Engineering                              | 6   | 106               | 1           | 0.08                       | 4  | 24                                     | 0.17                       | 0.00               | 4.00                   | 0.24        |
| 11  | Journal of<br>Mechanical<br>Engineering                                   | 3   | 21                | 1           | 0.00                       | 3  | 21                                     | 0.14                       | 0.00               | 1.00                   | -0.11       |

Figure 9 Results Displayed under "Journal Citation Statistics" Ordered by 2-Year Impact

there are no restrictions in terms of access to resources and systems. They are developed to support a collaborative environment. In summary, MyAIS has made it possible 1) to gauge Malaysian publication performance at both individual and national levels; 2) to motivate Malaysian academic publishers to contribute and archive their journals in order to improve the availability and visibility of their scholarly journals; 3) to contribute to enriching national research content; 4) to have better knowledge of the nation's research outputs funded by universities and research institutions; and 5) to improve information access to end-users. MyAIS empowers the scholarly community of users and can support utility at the national level. This would provide access to

published Malaysian scholarly works and it may trigger collaboration and citations.

### Acknowledgement

This project was made possible from two fundings; Fundamental grant (FRGS) provided by the Ministry of Higher Education through the University of Malaya in 2006: FP056/2006A and Research University Grant (PPJ) in 2007 to 2008.

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### FORM IV

(as per Rule 8)

## Statement regarding ownership and other particulars about: WDL (World Digital Libraries: An International Journal)

1. Place of Publication : New Delhi

2. Periodicity of its Publication : Half-yearly

3. Printer's Name : Dr R K Pachauri

Whether Citizen of India : Yes

Address : The Energy and Resources Institute

Darbari Seth Block

IHC Complex, Lodhi Road New Delhi – 110003

4. Publisher's Name : Dr R K Pachauri

Whether Citizen of India : Yes

Address : The Energy and Resources Institute

Darbari Seth Block

IHC Complex, Lodhi Road New Delhi – 110003

5. Editor's Name : Debal Chandra Kar

Whether Citizen of India : Yes

Address : The Energy and Resources Institute

Darbari Seth Block

IHC Complex, Lodhi Road New Delhi – 110003

6. Name and address of individuals who : The Energy and Resources Institute

own the newspaper and partners Darbari Seth Block

one per cent of the total capital New Delhi – 110003

I, R K Pachauri, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Signature of Publisher

(Sd/-)

Date: 1 July 2012 Dr R K Pachauri