

World Library and Information Congress: 70th IFLA General Conference and Council

22-27 August 2004 Buenos Aires, Argentina

Programme: http://www.ifla.org/IV/ifla70/prog04.htm

Code Number: 052-E

Meeting: 149. Library and Information Science Journals

Simultaneous Interpretation:

Library and Information Science Journal As a Tool For Continuing Professional Development in Malaysia : A Bibliometric Study

By Assoc. Prof. Dr. Ahmad Bakeri Abu Bakar

Deputy Dean (Academic Affairs) Kulliyyah of Information and Communication Technology International Islamic University Malaysia

INTRODUCTION

Continuing education for information professionals is essential in meeting the challenges of the vastness of new knowledge being generated in the world and the advances of technology and has become the vehicle for our profession to excel in the provision of services to the users. Today, we see most of our libraries are adopting sophisticated information and communication technology (ICT) as an integral part of their operations. Library operations have moved from manual to online practices. Card catalogues have been replaced by the Online Public Access Catalogues (OPAC). Internet access hosted by the academic library for example is so easy to be connected that a student who owns a notebook is able to make the Internet connection without any fuss from any locations on campus via the wireless technology.

The drastic changes in the ICT are forcing information professionals to adopt futuristic strategies. To develop these strategies successfully one must keep up with not only today's

constant changes but also the innovations. The information professionals must be willing to go beyond acquiring, processing, storing, retrieving and making available the usual library materials in establishing innovative library services. Ignoring this approach may result in occupational obsolescence for the information professionals in the unforeseeable future as the role of future libraries will be determined not only by the dedication and proficiency but also by the innovativeness of their work force.

Innovation

In this environment of rapid changes and rising user expectations we can expect to see increased demand for specialized knowledge and skills among the information professionals as well as the demand for innovation to securing competitive advantage among the information providers by developing and introducing new services, products or processes for the libraries. As 'innovation' defined by (Kuczmarski, 2003) is "a mindset, a pervasive attitude, or a way of thinking focused beyond the present into the future vision", it is important for an organization or institution to foster and maintain an innovative culture among the work force in order to gain increased productivity, quality and yield from the innovations. However, few have been able to maintain a culture that supports innovation as a top strategic priority (Kuczmarski, 2003). Thus, there is a need to import from somewhere the innovative ideas or proposals. Access to information, ideas and experience enable individuals to devote time to build on good ideas and incorporate them into innovative products and processes. One of the most effective ways to access for information and remain professionally updated is reading professional literature. Attending conferences, workshops, seminars and professional meetings are other ways of keeping oneself updated with the latest information, ideas and experiences. All these efforts are usually categorized as informal ways of continuing professional education programmes. Formal continuing education programmes could take the form of registering for certain specialized subjects or course offerings from the Schools of Library and Information Science.

Given the importance of innovation in contributing towards the invention of new process, products and services it would seem appropriate for a study to be conducted on identifying whether or not articles that are published in the professional journals discuss issues that can be classified as prescription of new ideas or novelty that could be transformed later into valuable asset for the libraries. It is through the transfer of information on innovative ideas and experiences from the informal to the formal domain which occurs with the journal publication of an article that judgment be made on the success or failure of innovations in creating the body of new knowledge on which development of the discipline can proceed. Even if the innovative ideas that are taken from an article were carried out in the real world found to be unsuccessful, at least it is known that we have advanced the frontiers of the profession. This is important as (Danton, 1976) argued "The frontiers of the profession will not be advanced, its fundamental problem will not be solved, and the many 'whys' which it faces will not be answered by 'how-wedo-it-good-in-our-library' articles, no matter how numerous, useful, informative and well done". Our failures could be used as lessons for others to be reminded in the continuing education development for the information professionals.

However, one should realize that not all innovative ideas are associated with the creation of new knowledge as there are some innovations which are based on reuse of existing knowledge. The

constituent elements of innovation from a knowledge perspective, the so called 'innovation cube', are as follows: reuse of existing knowledge; invention of new knowledge; exploitation (i.e. turning knowledge into value); innovation life cycle; the enabling ecology or operating context in which the innovation occurs and the performance facet (Edvinson, 2004). In relation to the performance facet a review of past research on organizational innovation reveals that there were four criteria that have been applied to product and process innovations. These criteria are the number of innovations, speed of innovation, level of innovativeness (novelty or newness of the technological aspect), and being the "first" in the market (Hollenstein, 1996), (Subramanian and Nilakanta, 1996).

Before going into the detail of the study it is important at this juncture to take stock of some of the major points concerning the conduct of the study. Firstly, the objective of the study is to determine whether library and information science journals hosted articles which carry the message of innovations that are meaningful to scholars and practitioners such that this piece of information generates a forum for discussion among them. Through this process of interaction readers of the journal are able to benefit from lessons and experiences on innovations thereby enriching the learning process of those who partake in the continuing education programme. Secondly, this study is limited to a library and information science journal published in Malaysia, the *Malaysian Journal of Library and Information Science*. This journal is selected because it publishes original research and is a vehicle for communicating new ideas and development related to Malaysian librarianship in particular and Asian librarianship in general.

Evidently, the outcome of the study would have to be different from other studies done elsewhere as the objectives and readerships of journals go far to determine contents, approach and indeed, the whole 'atmosphere' of the journal (Danton, 1976) and as Lechmann put it, "Journals are a 'mirror-image,' of the infrastructure of librarianship of the country in which they are published . . . unlike American academic library journals such as Library Quarterly, Journal of Academic Librarianship most of the major German journals publish scholarship and research together with 'news,' covering conferences, exhibits, institutional developments, important promotions, substantial obituaries and the like". In the case of the Malaysian library journals they do not have all the elements mentioned by Lechmann. It might be pertinent to reiterate that the Malaysian journal title used in this study will carry on the banner of readership, contents, scope of coverage which reflects the editorial decisions and the cultural milieu of the country. Thirdly, the application of bibliometric research method to study the occurrences of the innovative ideas that are published as part of the contents of the articles is suitable for the extraction of information on the types of innovation that are published, whether they belong more to innovation of products, services or processes. It is pertinent to note that the analysis on the number of innovations and level of innovativeness which are part of the criteria used for performance measures of innovation can only be conducted on the basis of contextual analysis of the articles which is one of the major bibliometric methods used to study the phenomena of scholarly or scientific communication. Fourthly, it might be useful to point out that innovative ideas discussed in the articles are indeed important for the information professionals if they are tried and tested for their benefits globally. This means that if the innovative process, product or services were to be tried and perhaps implemented on a global scale it must be made known to the international audience first. This can only be achieved if the journal title is abstracted by the international indexing and abstracting services such as LISA PLUS for example. In the case of the journal title used in the study it has been abstracted by an international abstracting services thereby is suitable for bibliometric analysis.

METHODOLOGY

The primary focus of this study is to look at the role of the LIS journal as a channel for communicating innovative ideas which could be categorized as product, service or process-based. As one of the objectives of professional journals as stated by (Borchardt, 1989) is supposed to invite professional debate on professional matters it can then be argued that the journal can serve as a good platform or forum for debates on innovative ideas. Additionally, the information professionals may use the journals as sources for enriching their understanding on the latest professional practices and competence in their pursuit for quality and excellent performance. This way the journals are engaged directly or indirectly in the continuing education of the information professionals by providing them with various alternatives as well as new ideas for them to exploit.

In this study only one library journal has been selected for an analytical assessment of its role in communicating innovative ideas. The *Malaysian Journal of Library and Information Science* was selected after a thorough investigation was done on the serials titles devoted to the discipline of library and information science in Malaysia. There are ten serials titles in this discipline published in Malaysia (Sin, 2001). They are namely, *Perutusan RATU Darul Ehsan, Jernal Maklumat, Berita Perpustakaan Sekolah, Library Industry, Malayan Library Journal, Mutiara Pustaka, Tinta, Kekal Abadi, Sekitar Perpustakaan, Malaysian Journal of Library and Information Science.*

However, the first five have ceased publication and the rest with the exception of the *Malaysian Journal of Library and Information Science* are irregulars and non current. For example, the last issue of *Mutiara Pustaka* was published as Vol. 10 June 2000, *Tinta* was published as Vol. 17, 2000, *Kekal Abadi* as Vol. 19, No. 2, 2000, and *Sekitar Perpustakaan* as No 32, 2001. The latest issue for the *Malaysian Journal of Library and Information Science* appeared as Vol. 8, No. 2 December 2003. Thus, it would be difficult for a bibliometric analysis to be conducted on journal contents between 2000 and 2003 for the other library journals published in Malaysia as there are not enough data that can be used for assessing innovative ideas in the articles of the other library journals.

To assess whether the articles found in the *Malaysia Journal of Library and Information Science* constitute contents that contain innovative ideas a method called contextual analysis was used. This method is widely used in bibliometric studies in which contents based on preferred words, phrases or concepts are searched in the body of the article or title entry. The purpose here is to identify the number of times or occurrences that a particular concept, word, or phrase appears in the articles. In this study the concept of innovative ideas have to be counted from the articles published between 2000 and 2003. The guideline that will be used in the identification of innovative ideas will be based on whether the proposals, suggestions or simply the items discussed have the set of values that represent a belief in seeing beyond the present into the future vision. Once the innovative ideas are identified based on the aforementioned guidelines then they will be classed as service, product or process—based innovations.

As the *Malaysian Journal of Library and Information Science* is the only LIS journal in Malaysia that is current and regular it can be argued then that its selection as a source document is valid and reliable for purpose of bibliometric analysis in this study. This is important as the correct choice of the source document is essential in any bibliometric studies. This is due to the fact that the unit of analysis, which in this study are the articles found in the journal, originated from the source document. Any error in the selection of the source document will lead to flawed conclusions. Given this setting it can be inferred that this journal is the only one that publishes on all matters pertaining to research and development in LIS as well as state-of-the art-surveys, discussion on innovative ideas and topics of interest to information professionals, etc. Thus it is the primary source for those professionals who would like to read and update their knowledge and understanding on professional matters and thereby being educated in the process of information gathering.

The scope of the study is to conduct a contextual analysis on the articles of the said journal from Volume 5 No. 1 2000 to Volume 8 No. 2 2003. All the articles are checked for any signs of innovative ideas that the authors have raised in their discussion on a particular topic. Once the researcher has identified a particular article carries the attribute of innovation as defined in the foregoing the next step was to categorize the innovative ideas according to the criteria of product, process or service-based. A total of 56 articles were published within the time frame of the study. The spread of the articles per issue ranges from a minimum of six to a maximum of ten articles per issue. The contents of the articles cover a wide variety of topics which are of interest to the information professionals thereby making the journal a primary source for information professionals in Malaysia to keep abreast with the trends and development in the field of library and information science. It is evident that there is no "news-type" of articles found in the journal and this could be due to the fact that the journal is academic in nature and as such its concentration would likely be scholarly and research oriented. The distribution of articles based on the respective issue of the journal is as shown in Table 1. It is clear that the inclusion of articles is not guided by a consistent policy on the number that should be slotted per issue. It is guided more by the availability of the articles submitted by the authors at a particular time as can be seen in the case of Vol 8 No.2 (10 articles) against that of Vol 8 No. 1.(6 articles). The high count of articles in the former, however, does not mean that the quality of the articles published has been compromised as the journal is the only LIS journal published in Malaysia which is refereed and is regularly published. It does not suffer the same fate as some of the other journals where the number of journals published in the country in the field of library and information science are too many that may warrant some editors to accept any articles irrespective of the quality as long as the number of articles targeted for an issue is met. It is important for us to note this point as it has been found in the literature that an editor struggling to fill an issue may be tempted to accept articles of poor quality (Haddow, 1997).

Table 1
Distribution of Articles According to Issue

| Issue | Number of Articles According to Issue |
|-------------------------|--|
| Vol. 5 No. 1, July 2000 | 6 |
| Vol. 5 No. 2, Dec 2000 | 8 |
| Vol. 6 No. 1, July 2001 | 7 |
| Vol. 6 No. 2, Dec 2001 | 7 |
| Vol. 7 No. 1, July 2002 | 6 |
| Vol. 7 No. 2, Dec 2002 | 6 |
| Vol. 8 No. 1, July 2003 | 6 |
| Vol. 8 No. 2, Dec 2003 | 10 |
| Total | 56 |

The figures in Table 2 show the distribution of articles on innovative ideas that have been published in the respective issues of the journal. It is evident that all the issues carry at least one article that contains materials purported to carry innovative ideas. This revelation is important as it is expected that a great number of the articles in LIS journals are devoid of innovative ideas but replete with news-type articles (Saracevic and Perk, 1973). Here, contrary to expectation, we see articles with innovative ideas are given due recognition by the editor and this trend seems to prevail based on the figures for Vol 8 No. 2. which shows that there are three out of ten articles that can be characterized as having innovative ideas.

Table 2
Distribution of Articles on Innovative Idea According to Issue

| Issue | Number of Articles |
|-------------------------|--------------------|
| | On Innovative Idea |
| Vol. 5 No. 1, July 2000 | 1 |
| Vol. 5 No. 2, Dec 2000 | 1 |
| Vol. 6 No. 1, July 2001 | 2 |
| Vol. 6 No. 2, Dec 2001 | 2 |
| Vol. 7 No. 1, July 2002 | 1 |
| Vol. 7 No. 2, Dec 2002 | 2 |
| Vol. 8 No. 1, July 2003 | 1 |
| Vol. 8 No. 2, Dec 2003 | 3 |
| Total | 12 |

Based on the above findings it can be argued that LIS journals may be appropriately used by information professionals for their continuing education as these journals could carry materials which are innovative enabling them in creating or developing new process, products or services.

This also proves a valuable point because by extension of the argument it can be said that that the LIS journals can be a medium for open discussions on the newly thought ideas.

The figures in Table 3 show the distribution of articles according to the type of innovative ideas, namely process, product or service-based. It is found that most of the innovative ideas are process oriented. For example, there is an article that tries to promote the idea of using the 'Business Process Reengineering', a process widely used in the business world, for the core process of the library. Another example in this category is the proposal to apply a newly developed algorithm for distributed system reliability.

Table 3
Distribution of Articles According to the Type of Innovative Ideas

| Issue | Number of Articles According to the Type of Innovative Ideas |
|-------------------------|--|
| Vol. 5 No. 1, July 2000 | Process |
| Vol. 5 No. 2, Dec 2000 | Product |
| Vol. 6 No. 1, July 2001 | Process (2) |
| Vol. 6 No. 2, Dec 2001 | Service and Process |
| Vol. 7 No. 1, July 2002 | Process |
| Vol. 7 No. 2, Dec 2002 | Process (2) |
| Vol. 8 No. 1, July 2003 | Process |
| Vol. 8 No. 2, Dec 2003 | Service and Process (2) |

It is important for the information professionals to be aware that a whole lot of new processes can be learned from reputable LIS journals. The fact that process-based innovations occur more frequently suggests that process is more important for enabling the information professionals to run their operations efficiently and effectively. This is also true if we were to contemplate that the quality dimension used in ISO 9000 assessment is strictly process-based.

CONCLUSION

The study has shown that LIS journals are as important as other scientific journals as a tool for communicating innovative ideas which can be process, product or service-based. The information professionals can gain benefits by engaging these materials as they are able to discern the utility of those ideas thereby helping them in making the right decisions for the betterment of their community and society at large. Engaging these materials may take the form of an open discussion and debates on some of the critical issues through informal and formal channels. It is hoped through these actions and trials and errors that the information professionals become more learned and educated.

References

1. Borchardt, Dietrich H. (1989) Journals for the Profession: Comments on their Role and Function Australian Library Journal, 38, pg. 219-226

2. Danton, J. Periam (1976) *The Library Press*Library Trends, 25, pg. 153-176

3. Edvinson, Leif et. al. (2004) *Innovations: The New Unit of Analysis in the Knowledge Era*Journal of Intellectual Capital, 5, pg. 40-58

4. Haddow, Gaby (1997)

The Nature of Journals of Librianship: A Review Libres, 7

5. Hollenstein, H. (1996)

A Composite Indicator of a Firms Innovativeness
Research Policy, 25, pg. 633-645

6. Kucmarzki, Thomas D. (2003) What is Innovation? And Why Aren't Companies Doing More of It Journal of Consumer Marketing, 20, pg. 536-541

7. Lehnmann, Stephen (1995)

Library Journals and Academic Librarianship in Germany: A Sketch

College and Research Libraries, 56, pg. 301-312

8. Saracevic, Tefko and Perk Lawrence J. (1973)

Ascertaining Activities in a Subject Area Through Bibliometric Analysis

Journal of the American Society for Information Science, 24, pg. 120-134

9. Sin, Tiew Wai (2001)

Malaysian Library and Information Science Periodicals: A Historical Overview Sekitar Perpustakaan, 32, pg. 42-51

10. Subramaniam, A., Nilakanta, S.. (1996) Organizational Innovativeness: Exploring the Relationship Between Organizational Determinants of Innovation, Types of Innovation and Measures of Organizational Performance Omega, 24, pg. 631-647