BENCHMARKING FOR QUALITY IMPROVEMENT IN ACADEMIC LIBRARIES: A STUDY WITH SPECIAL REFERENCE TO BANGALORE CITY COLLEGE LIBRARIES

Sathya Bhama V.* and S. Srividhya**

Abstract: Benchmarking is a best practice which entails continuous improvement in any operational association. The aims of this paper are tooimprovedunderstand the concept and evolution of benchmarking in academic libraries. This paper focuses on benchmarking practices in Higherlearning. The study is supported on the assessmentperformed in the college libraries located in Bangalore city which is focussed in this article. The libraries constantly strive to satisfy the demands of stakeholders by improving quality in an ever changing environment. Benchmarking is a tool, a methodology and a technique for continuous improvements of one self. This is applied for libraries in higher education in Bangalore. Benchmarking includes various practical in its ambit. For instance, a properly computerized library will help its users with quick and prompt services. Such practices, on a whole, goes a long way in improving the library services. This study is an attempt to understand the benchmarking practices in college libraries located at Bangalore.

Key words: Benchmarking, Best practices, Benefits, Library Facilities, Services, Library automation.

INTRODUCTION

Benchmarking is a tool for improving performance by learning from best practices and understanding the process by which they are realized. It occupies a complete recognizingofthe process, analyzing the process of others and then, comparing the performance with that of others analyzed. Finally, necessary steps are taken to close the performance gap. The highest performer in a benchmarking partnership is considered the organization with the most excellent practices i.e., the one that has the mainly efficient and effective practices in place. The goal of benchmarking in this development, is to developpresentation by implementing the best practices of benchmarking partners. Libraries come up with various performance indicators which are then used for measuring performance and monitoring progress against set targets.

^{*} Librarian, Government First Grade College, Frazer Town, Bangalore.

^{**} Assistant Professor, Anna University, Coimbatore.

Libraries, in their endeavour to keep themselves abreast with the growing demands seek to improve themselves by benchmarking. There can be a quantity of reasons for institutions to embark on benchmarking. Benchmarking amplifies the impending for improvement in numerous ways, as it. Provides a systematic approach to quality improvement. It establishes the extent of improvement required and brings an external focus to internal activities. This is achieved by using existing knowledge about the effectiveness of particular processes, identifying new ideas and innovative approaches. It further demystifies, encourages and provides a framework for change, enabling the incorporation of 'best practices' into one's organisation. The most important aspect is that it decreases subjectivity in decision-making by basing it on hard data and this helps create a learning organisation by promoting contacts and networks.

Benchmarking, as stated earlier, includes various practices library automation is one such practice that tops the most often cited practice automation revolutionized the world of information.

When applied to libraries, Library automation is a process that refers to mechanization of library housekeeping operationspredominantly by automation. The procedures that are most frequently engaged in this process are acquisition control, serials control, cataloguing, classification and circulationmanage. Library computerization or Integrated Library System (ILS) is an enterprise resourceplanning system for a collection. It is used to trackarticles holder, directs made, bills paid etc. The term automation was first used in 1936. Sometimes the terms 'mechanization and automation' show overlapped, but there is a distinction important linking the two.

Best Practices Benchmarking in Educational Institutions

Benchmarking 'best practice' as a means for continuous improvement through sustainable innovations is familiar in the world of organization. In modern years, this advance is also organism adopted in various meadows, including higher learning.

Benchmarking through best practices is not a new concept in higher education. It has already been tried by the ACS (Association of Commonwealth Universities) through CHEMS (Commonwealth Higher Education Management Service) in 1996. Many organizations are coming up with their 'best practices database' to demonstrate in practical ways what actually works in nourishing quality efforts.

University Grants Commission created a higher education body in 1994 in Bangalore on their commendation of National Policy of Education (NPE)during 1986. This body is created to consider the excellence of university and college institution. It strives for quality and excellence in higher education and advocates for enhancing the role of library and Information Services in improving academic environment. Document prepared by NAAC for "BestPractices in Academic Libraries says: "Best practice may be innovative and be aattitude, plan, policy, program, procedure or preparation that solves a problem or createnew opportunities and positively impact on group "NAAC developed a point of superlativeresearch followed in academic

libraries and presented under the following four broadarea:1. Management and Administration of Library. 2. Collection and Services. 3. Extent of User Services. 4. Use of Technology. (NAAC, 2006).

NAAC (National Accreditation and Assessment Council) system is the accreditation method that encourages best practices. The NAAC has introduced a methodology for benchmarking.

Emphasizing the need to reflect on most excellent practices, the NAAC intends to make the recognition and validation of best practices as a part of the accreditation strategy. NAAC engages on collecting data on the best practices in various aspects of an institution's implementation, in agreement with the 12-point schema envisaged for the NAAC's endeavour in the field of quality in higher education. The objective here is to identify not what constitutes a "best practice" at a theoretical level, but those best practices that already exist in the feasibility domain and have been practically proven so that they can be emulated elsewhere, triggering localized actions. This emphasis on the practical knowledge to improve upon oneself is what is inculcated in library benchmarking also. Here, different libraries comprise a group that constantly compares its practices with each other. The practices that is found to be the best becomes the 'Bench Mark' for all others in that group.

Best Practices- Benchmarking

Benchmarking is an increasingly popular tool in library services. In order to determine the effective, efficient and economical operation rate, this is a tool par excellence. It is an ongoing systematic means for measuring and comparing the work progress of an organization.

Benchmarking offers number of benefits. Some of them can be enlisted as follows:

- > To improvement performance and customer satisfaction.
- To identify and streamlining work process.
- ➤ To compose more efficient and effective processes.
- > To increase competitiveness and utilization of resources.
- To make possible better and faster decision-making.
- To improve professional relationship.

Benchmarking is of various types. They can be internal, functional, competitive or generic processes of benchmarking. Benchmarking forself-improvement is known as "Best Practices Benchmarking".

This obtain onrealize, or develop into adapted, partner best practices in the library.

Since best practices are always evolving, benchmarking is a continuous process. As a Total Quality Academic tool, it requires librarians to focus their efforts on improving the work processes that impact the delivery of library products and services

that are important to the customers. Benchmarking gives a tool to librarians to numerically measure the value of their library to the Academician. It provides with realistic, quantifiable goals based on a superior library practices.

Best Practices for College Libraries

The NAAC guidelines forms the first step in benchmarking. A database of documented practices is available on NAAC website and they assure that regular updating will be made with consultations on contributing institutions. For college libraries, NAAC has developed some of the best practices that can enhance the academic information environment and usability of college libraries. These are the measures taken to improve the quality. Some of them are:

- 1. Computerization of library.
- 2. Inclusion of sufficient information about the library in the college prospectus
- 3. Compiling student/teacher attendance statistics and locating the same on the noticeboard.
- 4. Displaying newspaper clippings on the notice board periodically.
- 5. Career/Employment Information/ Services.
- 6. Internet Facilities to different user groups.
- 7. Information literacy programs.
- 8. Suggestion box and timely response.
- 9. Displaying new arrivals and circulating a list of those to academic departments.
- 10. Conducting book exhibitions on different occasions.
- 11. Organizing book talks.
- 12. Instituting Annual Best User award for students.
- 13. Organizing competitions annually.
- 14. Conducting user surveys periodically.

OBJECTIVES OF THE STUDY

The primary objective of this study is to understand the process of benchmarking as a tool for quality improvement in academic libraries. The study looks into the nature of academic libraries, supported resources, facilities and services provided in libraries in Bangalore and assess quality of those services.

The specific objectives are:

- 1. To understand the status of best practices of academic libraries based resources, facilities and services provided by the government and Private college libraries in Bangalore; and
- 2. To study the various best practices adopted by college libraries.

STATEMENT OF PROBLEM

The process of benchmarking is adopted in various fields for qualityimprovement. This evolution entails information from peers. This study seeks to understand the process of benchmarking as a quality tool within the academic library setup.

METHODOLOGY

A. Data Collection

The current study adopted a twofold schema for data collection. A preliminary study of available resources was conducted primary. The nextstage consisted of principalinformation collection. For this purpose, a questionnaire was prepared. The questionnaires were addressed to Librarian at various institution libraries. It covers the a variety of routine practices as well as those that the librarians found were most significant markers of quality during the pilot study. It touches upon areas like professional information, Management competencies, Librarianship and Information Standards and skills, Information and Communication Technology skills and Means and Methods and constraints of in benchmarking along with comments and suggestions.

The researcher collected the primary data by personally visiting the various institution libraries. Apart from reaching information through questionnaire, the associatealso used inspection and interaction to gain required primary data for supplementing the questionnaire. Repeated visits were made to the selected libraries to make on the spot observation. In addition, a series of discussions were held with the professionals, experts and fellow researchers to get the clear picture of the concept. Therefore, this research work has used multiple methods to collect, analyze and consolidate the data.

B. Sample Structure

The study is based on the sample taken from first grade colleges located in Bangalore. The study primarily focuses on academic libraries in first grade colleges. The figure below depicts the sample frame:

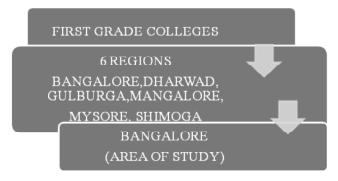


Figure 1: Sample Matrix

The study is focused on the First Grade Colleges in Karnataka in general and particular reference is to colleges in Bangalore. The First Grade colleges are categorized into 6 Regions. Bangalore has been picked for the purpose of this study as this is the state capital. Known as the IT (Information Technology) capital of India, Bangalore Institutions have the added advantage of having more exposure to computers and IT related information. Hence Bangalore becomes an ideal area of study to identify automation and benchmarking practices in academic colleges.

Within Bangalore, a further classification for the purpose of sample selection was made. Colleges in Bangalore are segregated into 3 categories based on the type of management. Government colleges are fully managed by the government of Karnataka, aided institutions are those under private management, but receive financial support from the administration. The third kind is that of private colleges that consists of those that are fully under private administration. (www.dce.kar.nic.in: 2015).

The questionnaire method has been adopted for collecting research data from the librarians of college libraries which has been distributed to all the 187 colleges' libraries in Bangalore. i.e. 114 private colleges, 46 aided institutions and 27 government colleges. This examine is partial to purely these colleges located in Bangalore. Out of these 126 filled in questionnaires have been considered for the study.

Sample Frame

In any empirical research two matters are of profound importance - sampling and measurement. FORMULA USED TO COMPUTE SAMPLE SIZE

The formulae for determining needed sample sizes when population size is known, as is the case in this study is elucidated below:

```
x=z(c/_{100})^2r(100-r)
n=^{Nx}/(N-1)E^2+x)
E=Sqrt[^{(N-n)x}/_n(N-1)]
In this equation,
N is the population size
```

R is the fraction of responses required for the study

 $z(c/_{100})$ is the crucial value for the self-confidence level c estimate of model: (Magnani, 1997)

Margin of error 5%
Confidence level 96%
Population size 187
Response distribution 10%
Required sample size 126

FINDING OF THE STUDY

The study sought to understand benchmarking as a quality management and improvement tool at the academic libraries. In this quest, various concepts appeared to be of prominence. Amongst these, based on the objectives of this particular study three important variables are taken up for consideration in this document. The first among these is the very difficulty of adopting benchmarking in college libraries. The researcher juxtaposed the variable of benchmarking practice adoption against the variable of college management.

In this case the college management is the independent variable and the adoption of benchmarking is the dependent variable. The researcher found that there is not much of a difference in adopting benchmarking when it comes to college management. Private colleges had 60% and Government/aided colleges had 62.5%. This shows that both the Government and Private colleges (61% on average) have now embarked upon the benchmarking process in order to improve upon themselves.

Table 1
Colleges Identifying Benchmarking Practices in library (n=126)

Responses	Govt./ Aided Colleges	Private Colleges
Identified	35	42
Not Identified	21	28
Total	56	70

The second aspect analyzed, after having considered significance, was to locate out those parameters that be thought to be the top benchmarking practices. A Nominal scale with 15 parameters as prescribed by NAAC was given and the librarians were asked to rate these from 1 to 15 where the most important factor was rated 1 and the least important was to be rated 15.

This subjective assessment showed that the role of library as a source of information was found to be of at most importance by most libraries. They found computerization of the process, providing a good environment and easiness use, condition for internet access to be very imperative, displaying newspaper clippings on notice board and displaying new arrivals. The questionnaire had a mix of variables ranging from providing information to encouraging library usage of all these, the role of library as the hub of information emerged as the most important factor that determines the quality of a library. The other factors merely argument the quality standards.

The third concept analyzed in this paper is the process of automation of library operations. The questionnaires administered, revealed the fact that the librarians felt that automation was paramount in offering better services and thereby increasing the quality of the collection. As a benchmarking practice, this progression is often emulated by a majority of colleges seeking to improve themselves. The following table shows the computerization status of various functions in the library.

Table 2
Top benchmarking Practices (n=126)

Sl No	Best Practices	Responses	
1.	Environment and usability.	16	
2.	Computerization of library	18	
3.	Inclusion of sufficient information about the library in the college prospectus.	11	
4.	Compiling student/teacher attendance statistics and locating the same on the notice board.	02	
5.	Displaying newspaper clippings on the notice board periodically.	13	
5.	Career/Employment Information/ Services	10	
7.	Internet Facilities to different user groups	15	
8.	Information literacy programs.	04	
€.	Suggestion box and timely response.	05	
10.	Displaying new arrivals and circulating a list of those to academic departments.	12	
11.	Conducting book exhibitions on different occasions.	06	
12.	Organizing book talks.	02	
13.	Instituting Annual Best User award for students.	03	
14.	Organizing competitions annually	05	
15.	Conducting user surveys periodically	04	
	Total	126	

Table 3
Automated Library Operation (n=126)

Sl No	Functions	Completelyautomated	Partiallyautomated	Manual
01	Circulation	28	38	60
02	Accessioning	51	28	47
03	OPAC	41	45	40
04	Cataloguing	36	46	44
05	Classification	36	46	44
06	Serials Control	42	44	40
07	Reference Service	56	22	48
08	Reminders	38	39	49
09	Bill Payment	36	39	51
10	Budgeting	38	41	47

The data reveals the fact that accession is a process that is automated most and circulation the best. This shows that the process of automation is still in its nascent stage. It also shows a clear inclination towards full implementation as the first step of accessions automation is already in place at most of the institutions.

CONCLUSION

Benchmarking has enabled libraries to better meet the needs of customers and to make it operate more efficiently and effectively. By identifying best practices current resources can be utilized better and a new service or product that a library may want to adopt.

Various functions that the library performs can be improved upon significantly by adopting benchmarking practices. The improvement of excellencedevelopment, as seen in this paper, further gets accentuated by automation. In this regard, benchmarking provides the librarians with a clear cut practical guide to improve upon themselves. Adopting benchmarking can support both the goals of the library and the customers that it endeavours to serve.

References

- Academic Libraries. Annals of Library and Information Studies, 50 (1), 27-30.
- Agarwal, S.P. (1987), Social Science Information and Documentation: Search for relevance in India. New Delhi: Concept.
- AmbaSanjeevini&Raghavan, K.S. (2000), Networking of Science City Libraries in Chennai: Some Issues, in proceedings of the NACLIN conference, New Delhi, DELNET, 230-242.
- Arora, Jagadish (2005), Managing Resources through Consortia: An Overview, Proceedings of the NACLIN conference, New Delhi: DELNET, 145-170.
- Arora, O.P. (1991), Information and Library Network [INFLIBNET]. In proceedings of the Indian Library Association Conference. New Delhi: ILA, 313-321.
- Arthur Francis (1986), New technology at work. Oxford. Pp. 216. Pierre Gavin (1977), Automation of cataloguing: some effects on library organisation. In: UNESCO Bull. Libr., pp. 298-304.
- Bakewell, K.G.B. (1990), "Resource Sharing: Practice and Problems", Library Management, Vol. 11, Iss: 3, pp. 2–48.
- Banerjee, Biswajit (2010), Networking of Government College libraries of West Bengal problems and prospects. In DESIDOC *Journal of Library and Information Technology*, 30(4).
- Bavakutty, M., SalihMuhamad, T.K. (1999), "Internet services in Calicut University", National Convention Academic Libraries in the Internet Era.
- Becker, H.J. (1998), "Internet use by teachers", available at: www.crito.uci.edu/TLC/findings/ Internet-Use/startpage.html.
- Chakaraborty, Abira & Maisal, Anjali. Library Automation and Networking: A case study on Hoogly Mohsin College. In Automation and Networking of the College Libraries, edited by Biswajit Banerjee. Maulana Azad College, Kolkata, 2006, 224-25.
- Concise Oxford English Dictionary (2007), Catherine Soanes& Angus Stevenson(edit). 2nd ed. New Delhi, Oxford University Press.
- Dev, Amiya Kumar and Hedge, Ganesh (2004), Best Practices in Infrastructure and learning resources, in best practices in higher education, report of the National Conference organized by NAAC, p.p. 85-97.
- Dickson Andrea & Holley R.P. (2010), "Social Networking in Academic libraries: the possibilities and the concerns", New Library World, Vol. 111 Iss: 11/12, pp. 468–479.
- Divakara Bhat, H., Proceedings of the 2 day National Seminar "In search of Information power-future challenges for Techno Libraries" September 11-12-2008.
- Goudar, I.R.N. (2006), E-Journals Access and Management: Contortia models for India. Unpublished Ph.D. thesis, Karnataka University, Dharwad, Karnataka, India.

- Henczel, Sue (2002), "Benchmarking-measuring and comparing for continuous improvement" Information Outlook, Vol 6, Iss 7.
- Jain Sanjeev kumar & Others (2008), Academic institutional repositories in India: Global visibility for an institution's scholarly communication. From http://drtc.isibang.ac.in/handle/1849/413.
- Konnur P. V. & Ragavan S. S. (2007), Bangalore University Academic Library Network (BALNET), 5th International CALIBER -2007, Panjab University, Chandigarh, 08-10 February, 2007 © INFLIBNET Centre, Ahmedabad.
- Kooganurmath, M.M., Jange, S. (1999), "Use of internet by social science research scholars: a study in academic libraries in the Internet era", National.
- Krishna Gopal, "Modern Library Automation", Authors press, 2000.
- Kumar Sampath B. T. & Biradar B. S., (2010), "Use of ICT in College Libraries in Karnataka, India: a survey", *Program, Electronic Library and Information Systems*, Vol. 44. Iss: 3, pp. 271 282.
- Kumbar, T. S. (1986), "College Libraries under Gulbarga University Area: A Survey", Library Herald, Vol. 25, No. 2-3, pp. 121-135.
- Lohar, M. S. & Kumbar, Mallinath (2005), College Libraries in Shimoga District: A survey. SRELS Journal of Information Management., 2005, 42(3), 335-53.
- Magnani, R. (1997), Sampling Guide.
- Mahajan, S.G & Patil, S.K. (1999), "Internet: its use in university libraries in India", National Convention Academic Libraries in the internet era, Ahmedabad,18-20 February 1999, INFLIBNET, pp. 483-8.
- Manjunath, G. K. (2008), Resource Sharing in the Internet Era: A Conceptual Model for Indian Social Science Libraries. Ph.D Thesis in Library & Information Science Dept. Karnatak University, Dharwad.
- Medhi Mayuri (2010), Networking of Academic Libraries in Guwahati: A Study, 7th, Convention PLANNER 2010, Tezpur University, Assam February 18-20, ©INFLIBNET Centre, Ahmedabad.
- Mishra R. K. (2000), Resource Sharing :The Third Dimension of Library Automation, Caliber-2000.16-18 February 2000, Chennai-600 005.
- Mittal, R. L. (2007), Library Administration: Theory & Practice. 5th ed. NewDelhi, Ess Publications.
- Murthy S.S, (1996), Library Networks in India An Overview, DESIDOC Bulletin of Information Technology, Vol. 16, No. 2, March, 1996, p. 9 @, DESIDOC.
- Murthy, T. A. V. & Kanakachary, M. (2001), Networking of Information houses in India: An Ideal Model. In Proceedings of the Indian Library Association conference. New Delhi: Indian Library Association, 552-565.79.
- NAAC. (2006), Best Practices in Library and Information Services.[online]Available from: http://www.naac.gov.in/best_practices (Accessed ondt.05/06/2015).
- NAAC. (2006), Library and Information Services: A Case Presentations. [online]Available from: http://www.naac.gov.in/casepresentations (Accessed ondt.05/06/2015).

- NAAC. (2006), National Assessment and Accreditation Council: A Brochure.Bangalore, [online] Available from: http://www.naac.gov.in/manuals_ass_accrd/manual (Accessed on dt.05/06/2015).
- NAAC. (2006), Quality Indicators in Library and Information Services: Affiliated/Constituent Colleges. [online] Available from: http://www.naac.gov.in/guidelines/ (Accessed on dt.05/06/2015).
- Oades, Caroline, (2005), "Benchmarking in Information Management" Managing Information, Vol 12, Iss 4.
- Prasad, V. S. and Stella, Antony (2004), Best practices benchmarking in higher education for quality enhancement. In best practices in higher education, report of the National Conference organized by NAAC, p.p. 1-10.
- Satyanarayana, N.V., Krishnan S. & Arora, Jagadish (2004), Library Consortia and Resource Sharing Initiatives in India: A White Paper. Bangalore: Rajiv Gandhi University of Health Science, 54.
- Shanti, P. & Anuradha, K. T. (2000), Compilation of union list of periodicals subscribed by major libraries in Bangalore. In Proceedings of the NACLIN conference. New Delhi, DELNET, 186-195.
- Sinha Manoj Kumar & Others (2007), Application of Information Communication Technology in College Libraries Of Barak Valley (Southern Assam), 5th Convention Planner -2007, Gauhati University, Guwahati, December 7-8, 2007.
- Takwale, Ram G. (2004), Leveraging quality assurance and accreditation in higher education for developmental education. In quality higher education and sustainable development, NAAC Decennial lectures, NAAC, Bangalore, pp. 121-141.
- Vishwanathan, T. & Raghavan, Jaysri (1994), MALIBNET: A Library Network for Madras. Annals of Library Science and Documentation, 41, 1-7.
- Vishwanthan, T. Mittal, R. & Lakshmi, V.V. (1991), Library Networks in India. Annals of Library Science and Documentation, 38, 39-52.
- Vyas S.D (2009), Best Practices in Academic Libraries in India: A Study, ICAL 2009 Management Models and Framework, p. 419.83.
- www.dce.kar.nic.in (Accessed ondt.05/06/2015).