CHAPTER - 1

INTRODUCTION

The present chapter is to highlight concept of Information, Knowledge, Knowledge Management, and Knowledge Audit, to specify objectives of the research, hypothesis of the research, limitation of the research, methodology & conspectus of the study.

1.1 PREAMBLE

Knowledge Audit is the important major phase or step of a knowledge management initiative, and is used to provide a sound investigation into the company or organization’s knowledge ‘health’. The audit is a fact-finding, analysis, interpretation, and reporting activity, which includes a study of the company’s information and knowledge policies, its knowledge structure and knowledge flow.

A knowledge audit is a planning document which provides a structural overview of a designated section of an organization’s knowledge as well as details of an organization’s knowledge as well as details of the qualitative and quantitative chunks of knowledge within that designated section.

In general, we seem to mean three things by our use of the word "knowledge." First, we use it to refer to a state of knowing, by which we also mean to be acquainted or familiar with, to be aware of, to recognize or apprehend facts, methods, principles, techniques and so on. This common usage corresponds to what is often referred to as "know about." Second, we use the word "knowledge" to refer to what Peter Senge calls "the capacity for action," an understanding or grasp of facts, methods, principles and techniques sufficient to apply them in the course of making things happen. This corresponds to "know how." Third, we use the term "knowledge" to refer to codified, captured and accumulated facts, methods, principles, techniques and so on. When we use the term this way, we are referring to a body of knowledge that has been
articulated and captured in the form of books, papers, formulas, procedure manuals, computer code and so on.

In Working Knowledge, Davenport and Prusak (1998) draw distinctions among data, information and knowledge. Data and information fit within the third category above, that is, the notion of a body of knowledge that exists apart from people. Their view of knowledge is that it is "broader, deeper, and richer than data or information." They offer this "working definition" of knowledge:

"Knowledge is a fluid mix of framed experience, values, contextual information, and ex-pert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knower. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms”.

1.2 PROPOSED RESEARCH

Knowledge audit is an accepted management technique, many different types of audits currently exist in the commercial world, e.g. financial audits, communication audits, technical audits, employment audits, and also more recently, information audits or knowledge audits. The major purpose of an information audit or knowledge audit is the identification of users’ knowledge needs as well as how well these needs are met by the information services department (Botha, 2000; Boon, 1990); organization waste billions on knowledge management because they fail to figure out what knowledge they need, or how to manage it in the context of application. It takes little imagination to work out that a knowledge audit would provide an evidence-based approach to help companies or organizations (Sharma and Chowdhury, 2007); a knowledge audit is a planning document, which provide a structural overview of a designated section of an organization’s knowledge as well as details of the qualitative and quantitative characteristics of the individual chunks of knowledge within that designated section (Debenham and Clark, 1994). The document also identifies the knowledge repositories in which those
chunks reside. The knowledge audit is scientific measurement of the state of affairs of specified sections of corporate knowledge. A critical part of a knowledge management methodology is performing a knowledge audit (Liebowitz, 1999).

Organizations conduct knowledge audits for a number of reasons, such as to: Identify what and where key knowledge assets can be found; identify knowledge gap (what they should know but don’t); identify high priority documents (in terms of demand and value) for migrating into a portal; use them to set knowledge management priorities and needs in a knowledge management strategy exercise; map the knowledge flow and current bottlenecks within those flows; develop an information and knowledge map of the organization; identifying and quantifying knowledge needs to meet organizational targets, the knowledge and expertise resources of the organization, and where the knowledge resides, who uses it, the barriers to its use, and the gaps that need to be filled Identifying resources, services and knowledge flow; verifying the existence of appropriate services; controlling costs; improving the marketability of services by increased visibility; exploiting the resulting improvements (DiMattia and Blumenthal, 2000).

1.2.1 STATEMENT OF THE RESEAERCH

Studies were carried out on the topic information management by Dixit (1991), Gaddagimath (1995), Chiplunkar (2002), Vijay Kiran (2002), Lomte (2003), Naushad (2004), Pant (2009) while studies on information management system were conducted by Bhattacharya (2004), Mukhopadhya (2005), Narkar (2006). The topic knowledge management was covered by Pillania (2004), Suchipriya (2005), Babulal (2005), Janardan (2005), Arora (2005), Datta (2007), Raman (2008), Senthilraja (2009). However no research has been carried out on the topic “Knowledge Audit”. Therefore researcher has undertaken the topic ‘Knowledge Audit: An analytical study’.
1.3 EXPLANATION OF THE CONCEPTS

1.3.1 AUDIT

Audit means to go through the process of examining and verifying an organization’s financial records and supporting documents. (Ward, 2009).

Audit is an examination of systems, programming and data center procedures in order to determine the efficiency of operations. (Answer. Com, 2010).

Audit is a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to interested users.

1.3.2 INFORMATION

Information can be defined as “the meaning that a human assigns to data by means of conventions used in their presentation”. In other words, information is data that has given shape. It may be considered as processed data. Thus, information is data plus the meaning, which is a result of human action. (Seetharama, 1999).

1.3.3 KNOWLEDGE

Knowledge is a sum total of information conserved by civilization. Knowledge is the perception of the agreement of disagreement of two ideas, (Clark, 2004).

1.3.4 INFORMATION AUDIT

According to Orna, (1999); Robertson, (1996); Botha, (2000), “An information audit is ‘a systematic evaluation of information uses, resource & flows, with a verification by reference to both people & existing documents in
order to establish the extent to which they are contributing to an organization’s objectives.

1.3.5 KNOWLEDGE AUDIT

Knowledge audit is a systematic & scientific examination & evaluation of the organization. The knowledge audit investigates & analyses the current knowledge environment. (Hylton, 2009; 2010).

1.4 OBJECTIVES OF THE RESEARCH

Present study has been undertaken with a view:
1. To survey the information needs of the user
2. To identify explicit and tacit knowledge assets
3. To determine cost of the resources
4. To analyze knowledge flow
5. To create knowledge map

1.5 HYPOTHESIS
1. Approximately 25% of collection would not be used
2. Overall collection of BAMUL is poor
3. Majority of faculties are aware about ICT. (Information Communication Technology).
4. Gaps exist in knowledge inventory.

1.6 SCOPE AND LIMITATIONS

The scope of the study is limited to Library & Information Science resources available in University Library as well as LIS teachers working in Department of Library and Information Science of Dr. Babasaheb Ambedkar Marathwada University Aurangabad.

Dept. of Library and Information Science

Marathwada University, now since 14th January 1994. Dr. Babasaheb Ambedkar Marathwada University introduced the postgraduate Diploma in Library Science Course during June 1968, with the persistent efforts of the University Librarian Late Shri N. A. Gore. During the year 1969, in all Universities in India the categorization of the course was changed from
Diploma in Library Science to Bachelor of Library Science, hence the examination of the course was conducted as Bachelor of Library Science in March/ April, 1969.

Even though the course was started during the year 1968, the statutory inception of the Department took place in the year 1979. The Master of Library & Information Science course was introduced during the year 1985-86 with the untiring efforts of the University librarian Shri R. G. Jogdeo.

Considering the importance of information in day-to-day life, and it is primary function of the Librarians to disseminate the information to their users, the subjects Information Science & Information Service were introduced in the course, hence the nomenclature of the courses as well as Department was changed from “Library Science” to “Library and Information Science.” Department started facilities leading to Ph. D. degree from the year 1996. Originally the Department started functioning in one wing of the University Library, while from the year 1995, the Department has its own building. Prof. Yeshpal, the former Chairman of UGC, performed the stone laying ceremony of the Department’s building & it was completed during the year 1992-93. UGC was generous to give the grant of Rs.12.00 Lakhs for the extension of Library & Information Science building during 9th plan period. The construction work of first floor of department is completed during 2006-2007. The amount of Rs.2000000/- has been sanctioned by UGC in 11th plan period as well as by the university during 2010-2011 for extension of department building (B.A.M.U., 2010).

Teachers

There are only three full time teachers working in the department of Library and Information Science, while one post of Lecturer and one post of Tutor-cum-Technical Assistant are vacant. There are 5 contributory teachers who help the department in completion of teaching task.

Dr. Babasaheb Ambedkar Marathwada University Library
Dr. Babasaheb Ambedkar Marathwada University Library (BAMUL) has in total 355734 collection of various subject. Library is having acquisition section, technical section, circulation section, reference section, periodical section, binding section, reprographic section, internet section, and so on. The library has 3764 collection of the subject of Library and Information Science.

Users

The users of the BAMUL are P. G., M. Phil, Ph. D. students as well as faculty members and Staff of Dr. Babasaheb Ambedkar Marathwada University

1.7 POPULATION SAMPLE

The term tacit knowledge holder covers faculty members of Library and Information Science Department in BAMU. The faculty members, namely, Professor, Associate Professor, Assistant Professor and Contributory Teachers in Department of Library and Information Science in BAMU have been included in this study.

The study is based on the teachers of Library and Information Science as well as the collection of Library and Information Science in Dr. Babasaheb Ambedkar Marathwada University Library (BAMUL). There are 8 teachers in department and 3764 documents on the subject Library Science in BAMUL. All these teachers are included in the sample population as per Krejcie and Morgan (1970) table. The population of tacit knowledge holders is given in table no. 1.7.1

Table No. 1.7.1: Total teachers in Department of Library & Information Science

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Designation</th>
<th>No. of respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Professor</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Associate Professor</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Assistant Professor</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Contributory Teachers</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>
All the collection of 3764 documents belonging to Library and Information Science subject available and spread over in different sections of BAMUL has been included in the study

1.8 METHODOLOGY

For the present study survey method, evaluation method, bibliographic method, citation methods have been used.

Survey method plays a significant role in research as can be seen from the statement. “The survey method is one of the most effective and sensitive instruments of research. Survey research can produce much needed knowledge” (Kasyap, 1969).

The survey was conducted with the help of structured questionnaire

Structured Questionnaire

A questionnaire is a group or sequence of questions designed to elicit information from an informant or respondent when asked by an interviewer or completed unaided by the respondent. When an interviewer is involved, the questionnaire is sometimes referred to as an interview.

A structured questionnaire, on the other hand, is one in which the questions asked are precisely decided in advance. When used as an interviewing method, the questions are asked exactly as they are written, in the same sequence, using the same style, for all interviews. Nonetheless, the structured questionnaire can sometimes be left a bit open for the interviewer to amend to suit a specific context.

Written questionnaires become even more cost effective as the numbers of research questions increases, questionnaires are easy to analyze, questionnaires are familiar to most people, nearly everyone has had some experience completing questionnaires and they generally do not make people apprehensive.
Design of Questionnaire

Questionnaire is often used in survey as primary data collection tool, is a written instrument. A structured questionnaire consisting of factual questions, attitude questions was prepared. It was largely self-administrated, for knowing about the organization, use of library, e-journals as well as mission of the department, and core task and the activities of the department.

The questionnaire consisted of 2 sections; in 2 sections there are 34 main and sub questions, viz.

Section I Consists of 10 questions on basic information of the teachers i.e. name, sex, designation, qualification, area of specialization, experience, number of students guided, number of students undergoing research under your guidance, publication of Research Articles, and publication of books etc.

Section II It consist of 50 questions, it covers identification of knowledge need, drawing up a knowledge inventory and its use, analyzing knowledge flow, and creating knowledge maps
It was estimated that it would take about 20 to 30 minutes time for the teachers to answer the questionnaire.

1.8.1 DATA COLLECTION

After deciding the sample population researcher distributed questionnaire (Appendix-A) to 8 teachers in Department of Library and Information Science of the 8 questionnaire distributed, 8 questionnaire duly filled in were returned, i.e. the response rate was 100%.

The BAMUL have out of 355734 collection 3764 collection in the subject of Library and Information Science. The policy of BAMUL was periodicals and reference collection not permitted for home use. The uses of Library were through in house as well as home use.

Bibliographic details of resources were collected along with Name of the Author, Title of the resources, Year of publication, Edition, Place of publication, Publisher, Price, Acquisition date of resources, Type of resources,
Class Number and use data etc. were noted on cards. The cards prepared were analyzed.

1.8.2 DATA ANALYSIS

The data was analyzed by quantitatively, qualitatively, by use, by cost and bibliometrically. The data collected was analyzed and presented under following headings viz.

- Department of Library and Information Science its vision, mission, goals and objectives, core activities, teaching tasks, etc.
- Identification of information needs of people and organization
- Drawing knowledge inventory of Explicit as well as tacit knowledge
- Analyzing knowledge flow
- Creating Knowledge maps

The rich & wide variety of quantitative data obtained has been checked & tabulated before processing & analysis was carried out. Data processing & analysis have been carried out with the help of Excel.

Checklist

For compilation of the checklist the latest OPAC (Online Public Access Catalogue) from various reputed Universities in India like University of Mumbai, University of Pune, University of Delhi, University of Calcutta, Punjab University Chandigarh, University of Kashmir, Tezpur University Napaam, Assam, Maharaja Sayajirao University, Baroda, University of Bangalore, Bangalore, Osmania University, Hyderabad, Bharathidasan University, Tiruchirappalli were used. The checklist contained in all 519 documents (Appendix-B), which was checked against the holdings of the library.

Sample for Relative Use

To calculate total relative use of Library and Information Science collection a sample was taken out at random from the shelves. The overall sample taken out for study was popularly used titles including multiple copies.
The overall sample of Library and Information Science taken out for study was 355 documents including multiple copies. For collecting the statistics for home use everyday data was being collected from the counter to record usage of check out sample.

To analyze data various statistical techniques like Ti, Ti-Square, and Weighted Arithmetic Mean (WAM) as well as Chi-Square were used.

**Ti-Square**

The responses to the questions on knowledge audit have analyzed using a five point scale 1 – Not Satisfied, 2 – Relevant Satisfied, 3 – Occasionally Satisfied, 4 – Frequently Satisfied, 5 – Highly Satisfied. Response of each question were analyzed & presented as tables with annotations where ever & when ever necessary for the purpose of analyses code 4 & 5 in each table are added & the tables are annotated, omitting 1 code, codes 2, 3, 4, & 5 are added to find out Ti & Ti-square, which are use for further statistical analysis.

**WAM (Weighted Arithmetic Mean)**

WAM arithmetic mean computed by considering relative importance of each items is called weighted arithmetic mean. To give due importance to each item under consideration, we assign number called weight to each item in proportion to its relative importance. It can be calculated from following formula:

\[
\bar{X}_w = \frac{\sum wx}{\sum w}
\]
Where: 

\( \bar{x} \) Stands for weighted arithmetic mean.

\( x \) Stands for values of the items and

\( w \) Stands for weight of the item (Gupta, 2009).

Chi Square \([X^2]\)

The chi-square (chi, the Greek letter pronounced "kye") statistic is a nonparametric statistical technique used to determine if a distribution of observed frequencies differs from the theoretical expected frequencies. Chi-square statistics use nominal (categorical) or ordinal level data, thus instead of using means and variances, this test uses frequencies.

A test that uses the chi-square statistic to test the fit between a theoretical frequency distribution and a frequency distribution of observed data for which each observation may fall into one of several classes.

The Chi Square \([x^2]\) test measures the alignment between 2 sets of frequency measures. These must be categorical counts & not percentage or rations measures. The Chi Square \([x^2]\) is one of the most popular statistics because it is easy to calculate & interpret.

1.9 SUMMARY OF MAJOR CONCLUSIONS/ IMPLICATIONS

1.9.1 Department of Library and Information Science

1. On 23\textsuperscript{rd} August 1958 Marathwada University was established. From 14\textsuperscript{th} January 1994 the university was renamed as Dr. Babasaheb Ambedkar Marathwada University (BAMU). BAMU has 46 departments under 13 faculties. Department of Library and Information Science is one amongst them.

2. BAMU introduced post graduate diploma in Library Science in June 1968, while due to the change in nomenclature from Diploma in Library Science
to Bachelor of Library Science, examination of the course was conducted as Bachelor of Library Science in March/April 1969. The nomenclature of the course was changed as Bachelor of Library and Information Science (B. Lib. I. Sc.) from 1991 while the course was closed down in 2002. The statutory inception of department took place in the year 1979. Department introduced Master of Library Science from 1985 is nomenclature was changed to Master of Library and Information Science (M. Lib. I. Sc.) from 1991 and from June, 2002 department is running two year integrated M. Lib. I. Sc. course. Master of Philosophy in Library and Information Science was introduced in 2008 and started facilities leading to Ph. D. degree from the year 1996.

3. From the year 1968 to 1993 the university librarian was the in-charge of the course, while Dr. (Mrs) A. A. Vaishnav is first Professor and Head of the department since 1993-till this date.

4. Department has formed Alumni Association from 2009. Meeting of Alumni is convened every year and from amongst alumni a special lecture is delivered.

5. In all 34 MLISc students have cleared NET/SET examination

6. There are only 3 full time teachers, in addition to this 5 contributory teachers share the work load. From the year 1995 the department has its own two storied building with class rooms, laboratories, teacher’s cabins, meeting hall, etc. Department has two laboratories one for M. Lib. I. Sc. Students and other for M. Phil and research students of the department. Laboratories are with 35 computers and requisite softwares with internet connectivity. Each full time teacher in the department is having computer with network connectivity.

7. Research in the department has covered the areas like library management, financial management, collection management, marketing management, quality management, library crimes, users survey, library services, library automation, websites, e-information literacy and information audit.
8. Full time teachers in the department have published 138 research papers and 5 books, department has organized 5 National Seminars, 8 refresher courses, 3 short term courses sponsored by DST and INFLIBNET and completed one major and 3 minor research projects.

9. Four Gold Medals and 3 prizes have been instituted for the students of the department standing first in order of merit.

10. Prof. Neelamegham (Bangalore), Prof. P. N. Kaula (Lucknow), Prof. K. A. Issac (Kerala), Dr. K. S. Deshpande (Dharwad), Prof. M. R. Kumbhar (Dharwad), Prof. Bhattacharya (Bangalore), Prof. Vidyut Khaudwala, Prof. Harsha Parekh (Mumbai), Dr. S. G. Mahajan (Pune), Prof. S. Seetharama (Bangalore) have visited the department

11. Dr. (Mrs) A. A. Vaishnav and Dr. Shashank Sonwane from department were invited to deliver lectures by different institutions all over the country.

12. Prof. S. Seetharama, the former Head of Documentation Research and Training Centre (DRTC), Indian Statistical Institute, Bangalore, donated his personal collection, which includes, Books, Standards, UNESCO Reports, DRTC Annual and Seminar Volumes, Dissertations, Reprints, LIS-Curricula’s, etc. worth more than lakhs of rupees to the Department of Library and Information Science, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

13. Every year 2-5 students from the department take implant training in Central Reference Library, Kolkatta. These students are given training for the use of LibSys & GIST software’s. Every student prepares a bibliography of Marathi/Urdu books received by Central Reference Library under Delivery of Books Act. So far 10 students had been trained from the year 2005.

14. Department is planning to introduce 5 year integrated MLISc programme as well as short term courses of 6 months duration and diploma courses of one year duration.
1.9.2 Identification of Knowledge Needs

15. Of the total 8 respondents, 62.5% to 100% respondents responded that the core tasks and activities of the department viz. 1) Teaching, 2) Checking authenticity of available information, 3) Keeping abreast of latest development in the field, 4) Evolving innovative ideas/techniques, 5) Checking and evaluating ones/own result, 6) Preparation for teaching, 7) Locating relevant information, 8) Motivating students, 9) Presenting information, 10) Skillful communication, 11) Orienting your work with the existing body of knowledge, 12) Doing research, 13) Research guidance, 14) Broadening area of attention & reviewing work done in related area are highly relevant core tasks and activities.

16. Of the 8 respondents, 62.5% to 87.5% respondents responded that the services they highly need to perform their work are viz. 1) Computer & Internet services, 2) Reprographic Services, 3) Reference Services, 4) Bibliographic services, 5) Book lending service, while in addition to this 37.5% to 50% respondents stated that 6) Inter Library Loan, 7) SDI Services, 8) CAS Services, 9) News Paper Clipping Services, 10) Display of new arrivals, 11) Book reservation service, 12) Reader’s advisory service are also highly required services by them.

17. Sixty two point five percent to eighty seven point five percent respondents stated that highly required information is 1) Procedural information, and 2) Information for writing a review article, while in addition to this 12.5% to 25% respondents stated that 3) Information for preparing the proposal for a new project, and 4) Writing research article is also highly required by them.

18. Of the total 8 respondents, 75% to 100% respondents stated that the Reason of Seeking Information were 1) General awareness of new Knowledge, 2) To prepare for class room were highly or frequently used, while of the 8 respondents, 12.5% to 50% respondents stated that in addition to this 3) To write text-books/articles etc., 4) For participating in the seminars/conferences/ workshop etc., 5) To meet the needs of promotional opportunities, 6) To generate new information out of curiosity &
Inquisitiveness, 7) Other reasons i.e. Link research work etc. were also major or frequent reasons of seeking information.

1.9.3 Drawing up a Knowledge Inventory

19. Actual size of Library and Information Science collection in BAMUL is 3764 which is 1.05% of recommended, size including basic collection and 1.39% excluding basic collection as per ACRL formula; 1.12% excluding constant as per Clapp and Jordan formula, 10.81% of total recommended size by Washington State formula and 25.01% of total recommended size by Ranganathan formula. In other words BAMUL did not fulfill the standards suggested by ACRL, Clapp and Jordan, Washington State formula as well as Ranganathan formula. Which indicate that the hypothesis “overall collection of BAMUL is poor” (Hypothesis No.2)

20. The average growth in the years 1958-2009 in Library and Information science collection was continuously decreasing. BAMUL acquired on an average per user 35.50% books in Library and Information Science. Of the total collection of Library and Information Science 56.83% collection remained unused, while only 43.18% collection was used. Per item circulation with total collection was 2.09 while per item circulation with used collection was 4.84. Which proves the hypothesis “Approximately 25% of collection would not be used” (Hypothesis No.1)

21. Of the total 62.5% respondents of Library and Information Science answered that the students complained about inadequacy of collection. Further, analysis of the student’s complaints showed that 100% of the complaints were about non-availability of the material, and books are in catalogue but missing from shelves, damaged collection, etc. Which proves the hypothesis “overall collection of BAMUL is poor” (Hypothesis No.2)

22. Sixty two point five percent respondents stated that the resources of the University library were not adequate for their research, for the reason that library lacks books on Information literacy, Technical writing, Knowledge management, which has hampered review of literature, while
proves the hypothesis “overall collection of BAMUL is poor” (Hypothesis No.2)

23. Seventy one point ninety one percent collection was inappropriate to syllabi. It can be further noted that for majority of papers the availability of collection was in the range of 11.11% to 44.82% only. In case of three papers i.e. classification, cataloguing and information retrieval library had 63.88% to 69.23% collection. Which proves the hypothesis “overall collection of BAMUL is poor” (Hypothesis No.2)

24. Of the total 12.5% to 37.5% users were of the opinion that collection of BAMUL is appropriate, while 12.5% to 62.5% users were of the opinion that periodicals and reference collection was up-to-date. Twelve point five percent users were of the opinion that collection of Encyclopedia, Dictionary, Indexes/ Abstracts and bibliographies was reliable in BAMUL. Of the 8 respondents 12.5% to 50% users opined that the collection of BAMUL was evidence based except periodicals, reference and e-resources, 37.5% users were of the opinion that collections of periodicals and Internet was adequate, while only 12.5% respondents were of the opinion that collection of textbooks, encyclopedia and dictionary was adequate. Of the 8 respondents 12.5% to 87.5% respondents opined that the collection of Library and Information Science was partially adequate or totally inadequate. Which proves the hypothesis “overall collection of BAMUL is poor” (Hypothesis No.2)

25. The percentage relative use of Library and Information Science collection in 2010 came to 11.54%. The BAMUL do not issue reference books and periodicals for home lending, however they are allowed to use inside the library only, relative use of General books, periodicals and Reference books was 93.52%, 1.12%, and 5.35% respectively. Relative use of the sub topics in the subject Library and Information Science was 27.11% collection was on Cataloguing and Classification, 21.82% Library Administration, 14.38% on Information Technology, 13.02% on Information Services, and 11.82% on Librarianship in general. The percentage relative use for matched and unmatched monographs was 45.35%, 54.64% respectively
26. Of the total 3764 books available on the subject Library and Information Science 2139 (56.83%), books had never been circulated, while only 1625 (43.17%) books were circulated. Which proves the hypothesis “Approximately 25% of collection would not be used” (Hypothesis No.1)

27. Users use latest documents only. A definite aging pattern emerges that is similar percentage of items enter the collection of circulating items in each year succeeding acquisitions.

28. By arranging number of document in decreasing order of circulation and dividing them into a nucleus three equal zone, circulation in each zone was more or less equal, while the numbers of documents in each zone were increasing rapidly. The total circulation of 7874 was divided into three equal zones, while numbers of documents in each zone were in the ratio of 132:430:1063. It was also plotted cumulative circulation as again log n=no. of document. It was found that the Bradford’s Law of scattering fits into the present set of data verbally as well as graphically.

29. The circulation distribution does not fit in Lotka’s inverse Square law applied to it, hence different procedure was adopting by calculating average value of $\hat{\alpha}=1.94$. The estimated proportions of authors as well as expected number of document were calculated. By applying to this statistics test at 0.01 levels of significance, K. S. static 0.031621841. It was found that $D_{max}=0.669706>0.031621841$, therefore data does not fits into generalized form of Lotka’s law with exponent value of $\hat{\alpha}=1.94$.

30. Twenty percent of the total documents contributed to 71.65% circulation, while 22.79 i.e. (23%) documents have contributed 79.17% circulation which is nearing 80% as predicted by 80/20 rule. Further it can be noted that 40% of the documents have contributed to 94.86% circulation. While 45.51% documents have contributed to 100% circulation. Hence price square root law does not fit into the present set of data while 80/20 rule partially fits in to the present set of data. However it supports the results of
study “Small portion of book collection accounts for major portion of total use” (Kent, 1978)

31. Of the total 3764, since 858 (22.79%) documents have accumulated 71.65% circulation these document to be considered as core collection, while 1625 (45.51%) documents were used atleast once or many times.

32. Of the total 3764 books, 1625 (43.17%) of the collection was used and 2139 (56.83%) was not used hence this collection can be considered as obsolete because these items have not been used during the years i.e. 1958-2010, and half life of books is 7 years.

33. From the year 1958-2010 percentage of number of used books is in increasing order. It can also be observed that very few books were dated as soon as they were purchased many of the books become dated as its age increased hence it can be said that as age of the books increases its use decreases, books become obsolete within 7-14 years of the age of acquisition or age of publication

34. Of the total 663 documents having last circulation date from 2010-2007, 9.80% volumes had last circulated in first three months, nearly 27.30% of the volumes had last circulation date in first six months, while 36.95% collection was circulated in first nine months, 43.74% collection was circulated in one year, and 77.82% collection was circulated in two years.

35. Of the 509 documents recommended in the syllabi, 143 (28.09%) documents were available in BAMUL. Of the 143 documents 126 (88.11%) were used. These 126 documents accumulated 819 circulation, which is 10.40% of total circulation of 7874, giving 6.5 per document circulation.

36. The overall percentage of availability of resources required by the research scholars of Library and Information Science in BAMUL was in the range of 18.25% to 58.97%, which means the resources in the range of 41.03% to 81.75% were not available, which is not satisfactory. Which proves the hypothesis “overall collection of BAMUL is poor” (Hypothesis No.2)
37. The cost of `407460.3 (23.31%) pertains to 1625 used items, and `1340494 (76.69%) pertains to 2139 items which were never circulated. While recent years increase cost of library material is continuing to reduce purchasing power of the budget which needs to develop need oriented collection development policy.

38. The total utility i.e. SAT is highest in the year 2004-2005, while it is lowest in the year 2009-2010. The total benefit of the year 2005-2006 is highest due to more use, while it is lowest in 2009-2010. The net benefit of the year 2007-2008 is highest, while remaining years net benefit was in minus, which indicates that due to low use, library is in loss.

39. Sixty two point five percent faculties working in department were Contributory Teachers while 37.5% teachers were full time. Amongst the full time teachers one each was Professor, Associate professor and Assistant Professor working in Library and Information Science department.

40. Fifty percent faculties were specialized in Information Technology (I.T.), 25% in Academic Library Management, while specializations in Research methodology, cataloguing, Academic Librarianship, Scientometrics, and Webometrics was of 12.5% respondents.

41. Dr. Vaishnav A. A. and Dr. Khaparde V. S. guided 188 students, while Dr. Veer D. K., Dr. Sonwane S. S., Deo V. N., and Dr. Adhe G. D. guided 153 students for M. Lib. I. Sc. dissertations, while Dr. Vaishnav A. A. alone has guided 8 students at Ph. D. level who have already been awarded the degree.

42. As regards the publication one of the faculty Dr. Vaishnav A. A. has crossed century, while the Librarian who is also the contributory Teacher in the department has 55 Publications at his credit, Dr. Sonwane S. S. and Golwal M. D. have published 50 publication; Mukhyadal B. G. and Deo V. N. have published 26 articles, and Dr. Khaparde V. S. and Dr. Adhe G. D. have combinely published 8 Articles.
43. Only three faculties have published books, the highest 8 books were published by Dr. Veer D. K., and 5 books were published by Dr. Vaishnav A. A., followed by only one book by Dr. Sonwane S. S.

1.9.4 Analyzing Knowledge Flow

44. The major gaps were in 1st semester in paper Information Search Strategy, Information Literacy and Use of Non-book material, while gaps in MLISc 2nd, MLISc 3rd semester, and MLISc 4th semester were higher than available resources, while gaps in M. Phil resources were highest in paper i.e. Research Methodology, Statistics and Evaluation, Management of Academic Libraries, Modern technique in Library Management and Library Automation and Networking in BAMUL. Of the total 509 titles recommended in syllabi only 143 were available in BAMUL, leaving the gap of 71.91%. Which proves the hypothesis “Gaps exist in knowledge inventory” (Hypothesis No.4).

45. The overall percentage of availability of resources required by the research scholars of Library and Information Science in BAMUL were not satisfactory as the gaps were in the range of 41.03% to 81.75%. Which proves the hypothesis “Gaps exist in knowledge inventory” (Hypothesis No.4).

46. Of the total items cited in thesis 82.97% books cited were available in BAMUL, while only 2.85% Periodicals, Conference Proceedings, Reports, and E-Journals cited were available in BAMUL. In other words there were gaps of 98.50% to 99.93% periodicals, conference proceedings, reports, e-journal collection. Which proves the hypothesis “Gaps exist in knowledge inventory” (Hypothesis No.4).

47. The teaching tasks like Information Search Strategy, Use of Non-book Material, Electronic Information Sources, Archives Management, and Web Page Design, the significant resources required were missing in BAMUL. Which proves the hypothesis “Gaps exist in knowledge inventory” (Hypothesis No.4).
1.9.5 Creating Knowledge Maps

48. Comparatively BAMUL is rich in the collection on Collection Development and Services i.e. classification, cataloguing, information retrieval, etc. so also in the areas of general library science, Types of Libraries and has highest resources on allied areas like information technology, financial management, etc. while it is poor in Library Building, Personnel Management, etc. Which proves the hypothesis” Gaps exist in knowledge inventory” (Hypothesis No.4).

49. Of the total 17.99% duplication was in Collection Development and Services, while 4.38% duplication in general library science and 2.95% duplications were in types of libraries, total duplicate collection was, 30.74%.

50. Dr A. A. Vaishnav (AAV) is a central asset for the department of Library and Information Science in term of her skills she is also the practicing leader for Management of Libraries, Marketing of Libraries, Information Literacy, and Archives Management as the shaded block in that column indicates. She has substantial experience in all sectors of the teaching activity. So also Dr. S. S. Sonwane is central asset in terms of his skills in the subject of information technology and classification.

51. Dr. Vaishnav A. A. is specialized in the area of Library Planning and Management, Library skills and Research in Library and Information Science, while Dr. Sonwane S. S. specialized in Information Technology, Documentation, Library Systems, Knowledge organization & information processing, Information sources and services,. Dr. Khaparde V. S. is specialized in the area of Thesaurus construction, Non-book material, Library Systems and Research methodology, while contributories fill in the gaps. Which disapproves the hypothesis “Majority of faculties are aware about Information Communication Technology (ICT)” (Hypothesis No.3).

52. There are 100% gaps in the availability of information sources for the papers Information search strategy, Use of non-book material, Archives management, Web-page design, 70% to 99% for the papers Information
literacy, Management of library and information centers, Information Technology: Basics, Technical writing, Electronic publishing, Research methods and statistical technique, Documentation, Information reading skills, Marketing of library and information centers, Rural and community information system,, Industrial information system, Intellectual Property Rights, and thesaurus construction, While the gaps in the range of 30% to 70% is for the subject Evaluation of information systems, Knowledge organization information processing and retrieval, Management of academic libraries, Modern techniques in library management, Library automation and networking, While regarding the type of material 98% to 99% gap was in periodicals, conference proceeding and reports. Because of the gaps in explicit knowledge students, research scholars as well as faculties suffer for want of information for examination, research and research projects respectively. Which proves the hypothesis “Gaps exist in knowledge inventory” (Hypothesis No.4).

53. In case of tacit knowledge the gaps are in the subject of Library and Society, Library Building, Personnel Management, Special Libraries, Reading and use as there is no publication of the faculties in this area. Which proves the hypothesis “Gaps exist in knowledge inventory” (Hypothesis No.4).

54. Of the total 3764 document 30.74% titles were duplicate, 17.99% duplication was in Collection development and Services, while 4.38% duplication in General Library and Information Science and 2.95% duplications were in Types of libraries.

55. There is hardly any duplication in tacit knowledge as compared to gap. However, it is expected that person appointed should be jack of all.

1.10 Implications of Result

1.10.1 Implications for UGC

- As the department is progressing, UGC should sanction the post of Professor, Associate Professor, and Assistant Professor in the ratio of 1:2:4 respectively, so that the department can undertake the projects like SAP (Special Assistance Programme)
• UGC should provide optimum amount for the development of department in respect of building, equipment and purchase of information sources.

1.10.2 Implication for Maharashtra Government

• As and when UGC sanctions the posts for the department Maharashtra Government should give concurrence to the post, so that full time teachers can be appointed by the university.

1.10.3 Implications for University Authority

• University authorities should implement the suggestion given by NAAC for the department of Library and Information Science.
• University authorities should provide infrastructural facility for the department by providing sufficient budget from the university funds.
• University should appoint the appropriate and skilled faculties, so that they can improve the departmental activities.

1.10.4 Implications for University Librarian

• BAMUL should maintain the record of the books which are missing from the library.
• Library should maintain the record of the demands of users for the books which are not available in the library.
• Library should maintain the record of in-house use in reading hall, reference section and periodicals section.
• As no library is self sufficient library needs to start Inter Library Loan facility
• Library should be Open Access for all students, teachers and others to provide books for all
• Special facility should be provided for NET/SET, MPSC, UPSC students. Number of books in reading room should be increased. Library should purchase recommended and latest books. Recommended books should be accurate and authentic.
• The book selection committee should include research scholars and P.G. students also, books should be selected on approval basis rather than selecting from the book catalogue or publishers catalogue.

1.10.5 Implications for Faculties

• To develop quality faculties should take research projects, published their research papers in journals with high impact factor.
• Faculties should try to be skillful in maximum areas of Library and Information Science.
• Faculties should organize National as well as International Seminar/ Conferences/ Symposia, etc.
• Faculties should take a lead to organize Short Term courses as well as training programmes for local Librarians.
• Faculties should undertake collaborative programmes with in and outside the country, as well as establish collaboration with industries.
• New courses as well as new subjects be introduced so as to make the subject job oriented.

1.10.6 Implications for Students

• Students should appear for NET/SET or equivalent test to prove the quality of the department.
• Students should participate of all activities in department to get leadership skills.

1.11 By-Product

The checklist covering 319 books, 39 reference books and 35 periodicals prepared by the researcher is appended in Appendix B covering recommended books in the syllabi of major universities in India, itself is by product of the study.

1.12 CONSPECUTUS

The present thesis has been divided under 5 chapters viz.
Chapter 1: Introduction

Introduction covers the preamble, proposed research, objectives, hypothesis, scope & limitations, methodology, summary of major conclusion & implications, & conspectus.

Chapter 2: Review of Literature

Describes in brief literature published on knowledge audit, Purpose of knowledge audit, need of knowledge audit, benefits of knowledge audit, components of knowledge audit, knowledge audit models, methods of knowledge audit

Chapter 3: Department of library and information science of BAMU

The chapter describes all activities mission, goals and objectives, core tasks of the department.

Chapter 4: Knowledge Audit

Knowledge audit has been conducted four stages these are as follow

1. Identifying Knowledge needs
2. Drawing Up a Knowledge Inventory
3. Analyzing Knowledge Flow
4. Creating Knowledge Maps

Chapter 5: Conclusions & Implications

Summarizes the major findings and presents the conclusions & implications drawn.

The thesis ends with the list of bibliographical references and appendices

1.13 CONCLUSION

For any research, it is necessary to survey what others have written on the topic, hence it was felt necessary to review literature on various aspect of Knowledge Audit, therefore, chapter-2 provides the review of literature on Knowledge Audit.

References:


